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January 27, 2004

VIA HAND DELIVERY

Walter Thomas, Secretary
Alabama Public Service Commission
100 N. Union Street – 8th Floor
RSA Union Building
Montgomery, AL 36104

**Re: Proposed Revisions to Price Regulation and Local Competition Plan
Docket No. 28590**

Dear Mr. Thomas:

Enclosed are the original and ten (10) copies of BellSouth Telecommunications, Inc.'s *Reply Comments* in connection with the above-referenced docket. Please distribute as needed and return a stamped copy of the cover letter to my office in the envelope provided.

Thank you for your assistance in this matter.

Sincerely yours,

Francis B. Semmes

FBS/mhs
Enclosures

cc: Honorable Carl L. Evans, Chief ALJ (via hand delivery)
Honorable John A. Garner, ALJ (via hand delivery)
Mr. Darrell A. Baker, Director (via hand delivery)
James E. Wilson, Esq.
Terry Butts, Esq.
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Parties of Record

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BEFORE THE
ALABAMA PUBLIC SERVICE COMMISSION

PROPOSED REVISIONS TO PRICE REGULATION AND LOCAL COMPETITION PLAN	))))	**DOCKET NO. 28590**

REPLY COMMENTS OF BELLSOUTH TELECOMMUNICATIONS, INC.

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BEFORE THE
ALABAMA PUBLIC SERVICE COMMISSION

PROPOSED REVISIONS TO PRICE REGULATION AND LOCAL COMPETITION PLAN	))))	**DOCKET NO. 28590**

REPLY COMMENTS OF BELLSOUTH TELECOMMUNICATIONS, INC.

By Order dated November 13, 2003 in this Docket, the Alabama Public Service Commission ("Commission") set forth a schedule for the submission of Comments and Reply Comments from interested parties regarding revisions to the Commission's Price Regulation and Local Competition Plan.[1] Consistent with the Commission's Order, BellSouth files the following Reply Comments.[2]

DISCUSSION

As a general observation, BellSouth notes that only three of the over seventy (70) competitive local exchange carriers ("CLECs") operating in Alabama even bothered to respond to the Commission's invitation to file Comments in this proceeding. It is no coincidence that the three CLECs that filed Comments are, in BellSouth's estimation, three of the most litigious CLECs in Alabama. The Commission should recall that these three CLECs spent a tremendous amount of time and effort trying to keep BellSouth from being able to bring competitive

1 Report and Order, September 20, 1995; *Petition of South Central Bell Telephone Company to Restructure its Form of Regulation*, Docket No. 24499; *All Telephone Companies Operating in Alabama, Generic Hearing on Local Competition*, Docket No. 24472; *Streamlined Regulation of Interexchange Carrier and Reseller Telecommunications Services*, Docket No. 24030; and *Complaint Filed by AT&T Communications of the South Central States, Inc. Against South Central Bell on April 25, 1995*, Docket No. 24865.

2 BellSouth is aware of Comments filed by the following: the Attorney General of Alabama; the Rural LECs; AT&T Communications of the South Central States, LLC ("AT&T"); MCI WorldCom Communications, Inc., and MCImetro Access Transmission Services, LLC (jointly, "MCI"); and ITC^DeltaCom Communications, Inc. ("DeltaCom").

alternatives to the Alabama long distance market. In keeping with their protectionist positions, these same three CLECs now seek to maintain, at the expense of competitive alternatives for Alabama consumers, a playing field that is slanted in their favor.

These three CLECs appear to suggest that BellSouth should be embarrassed by the success BellSouth has achieved in the long distance market and that the Commission should view that success negatively. To the contrary, BellSouth is proud of the fact that it has taken advantage of the competitive opportunities in the long distance market afforded by this Commission and the Federal Communications Commission ("FCC") and that BellSouth has been able to effectively compete once given a level playing field in that market. Alabama consumers have benefited from this level playing field in the long distance market in the form of better pricing, innovative services, and product bundles.

BellSouth submits that such a level playing field in the local market will likewise benefit Alabama consumers with better pricing, innovative products, and bundles of services. As noted in the Comments of the Alabama Attorney General: "Maybe the company with the lowest price should get the customer without any assistance from regulators." (Attorney General Comments, at 7)

BellSouth echoes this sentiment through its Comments and Reply Comments and seeks only to compete for retail customers under the same terms and conditions by which the CLECs compete for those same customers. The CLECs, on the other hand, seek to have the Commission place hurdles that will slow down, and in some instances preclude, BellSouth's ability to meet the CLECs' competitive successes. The best example of such a hurdle is found in Exhibit A (page 7) of DeltaCom's Comments, wherein DeltaCom attempts to impose in excess of a 30-day window, not on BellSouth's ability to conduct promotion activities, but on the *consumer's* eligibility for an incumbent local exchange carrier ("ILEC") promotion or contract service arrangement ("CSA"). Clearly, this type of anticompetitive restriction is a stark example of the CLECs' true motivations in this proceeding.

Instead of addressing the manner and timing by which BellSouth will make competitive responses in the retail marketplace, the three CLECs devote a large portion of their Comments to two unrelated, yet over-used themes: (1) the Commission should transform this docket into an inter-carrier compensation proceeding and reduce access charges; and, (2) this proceeding should be delayed. As BellSouth demonstrates below in its discussion of the individual Comments, and through the attached report of noted economist Dr. William Taylor,[3] the level of access charges is not germane to this proceeding, and a delay of this proceeding is not in the best interest of Alabama consumers. Therefore, the Commission should reject the CLECs' proposals and adopt BellSouth's Metro Pricing Flexibility Plan ("MPFP").

I. BELLSOUTH'S REPLY TO THE COMMENTS OF MCI

In its two pages of Comments filed in this proceeding, MCI primarily seeks to have the Commission lower access rates. MCI erroneously suggests that lowering access charges, which are charges paid by interexchange carriers ("IXCs") to make and complete long distance calls, is necessary to encourage local competition. As justification for this *non-sequitur*, MCI contends that "... BellSouth has made inroads into the long distance business much faster than CLECs have been able to penetrate the local market." (MCI Comments, at 2) Again, BellSouth will not apologize to the CLECs for bringing competitive alternatives to Alabama consumers immediately upon its being authorized to provide such services. The success BellSouth has experienced in the long distance market is testament to the fact that Alabama consumers are hungry for the competitively-priced services that BellSouth offers.

[3] The report of Dr. William Taylor is attached hereto as Exhibit A.

What MCI fails to address is the fact that, while BellSouth's strategic marketing plan was to begin offering long distance service immediately upon approval to do so, MCI took a vastly different approach in its local market entry strategy. MCI admits in its Comments that it did not enter the local residential market in Alabama until 2002,[4] some six years after the local market was opened to competition by the Telecommunications Act of 1996 (the "1996 Act"). Indeed, MCI had a six-year head-start on BellSouth in which MCI could have offered the local and long distance bundles that Alabama consumers are purchasing today. MCI, however, chose to spend those six years investing its time and money in a strategy designed to keep BellSouth from competing against MCI in the long distance market. It is no coincidence that MCI began offering local residential service in Alabama in the same year (2002) that BellSouth received authority to offer long distance services in Alabama.[5]

Clearly, MCI's perceived lack of success in the local market (a fact not supported by the evidence of local market share loss experienced by BellSouth) is nothing more than the direct result of MCI's litigation strategy; it has nothing to do with BellSouth or competitive forces in the Alabama local market. The Commission should not be distracted by MCI's invitation to morph this proceeding into an access charge proceeding. Instead, the Commission should remain focused on Alabama consumers and approving a plan that allows BellSouth to meet competitive challenges in a time and manner that maximizes the benefit to those consumers.

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4 MCI Comments, at 1.

5 MCI is not alone in this strategy of devoting resources to keeping BellSouth out of the long distance market instead of utilizing the six year head-start to execute a local market strategy. AT&T likewise entered the local market in Alabama very recently, less than three months ago (October 23, 2003), and only after losing the battle to keep BellSouth out of the long distance market.

II. <u>BELLSOUTH'S REPLY TO THE COMMENTS OF DELTACOM</u>

The Comments of DeltaCom follow a singular theme that is based on the proposition that the Commission should continue "asymmetric regulation" as to BellSouth. (DeltaCom Comments, at 2) BellSouth applauds DeltaCom for acknowledging that the competitive playing field is, through regulation, already artificially slanted in favor of the CLECs; however, DeltaCom fails to make any credible argument as to why the Commission should maintain these artificial competitive roadblocks.

For instance, DeltaCom makes the unsupported assumption that "BellSouth remains the dominant provider of local services in their territory." (*Id.*) While certainly true historically, CLECs have gained substantial market share in recent years, especially in the more lucrative business market that most CLECs primarily target. As demonstrated in BellSouth's Comments, CLECs have captured thirty-seven percent (37%) of the business lines and sixteen percent (16%) of the residential lines in BellSouth's operating area in the Tier 1 Metropolitan Statistical Areas ("MSAs"),[6] for a total CLEC Tier 1 market share of twenty-four percent (24%). (BellSouth Comments, at 27) Similarly, CLECs have captured thirty-three percent (33%) of the business lines and fourteen percent (14%) of the residential lines statewide in BellSouth's service territory, for a total CLEC statewide market share of twenty percent (20%). (*Id.*)

One asymmetric regulation that DeltaCom attempts (unsuccessfully) to justify is CLECs having shorter time frames to file retail tariffs than BellSouth. (DeltaCom Comments, at 3) DeltaCom argues that it should have greater flexibility than BellSouth when filing tariffs because of the potential for wholesale price increases by BellSouth.[7] (*Id.*) BellSouth certainly

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6 The Tier 1 MSAs per BellSouth's MPFP are Huntsville, Montgomery, Mobile, and Birmingham.

7 Given that wholesale prices are set by the Commission and are incorporated into interconnection agreements, this alleged concern by DeltaCom over sudden wholesale price changes by BellSouth is, at best,

understands why DeltaCom would want the flexibility to quickly change the price in a retail tariff, especially if DeltaCom's cost of providing that retail service changed. BellSouth is at a loss, however, to explain how that flexibility for DeltaCom logically requires a loss of flexibility for BellSouth's ability to make changes to BellSouth's retail tariffs. There simply is no correlation between those two events. As noted above, the wholesale rates that BellSouth charges CLECs are either set by the Commission through unbundled network element ("UNE") pricing proceedings or are approved by the Commission through filed interconnection agreements. The CLECs are heavily involved in both of these methods for setting wholesale prices (UNE proceedings and negotiation of interconnection agreements), which even the CLECs would agree are time consuming, often taking many months to conclude. Thus, any change in the wholesale prices that DeltaCom pays would be far from sudden. What DeltaCom really wants is the ability to bring changes to Alabama consumers quickly and, at the same time, hamper BellSouth's ability to make a timely competitive response to those changes.

Even more misguided is DeltaCom's contention that ILECs should be delayed (beyond the time given to CLECs) in filing tariffs because "[r]etail end users as well as wholesale customers must have a reasonable opportunity to adjust to a price increase." (*Id.*, at 5) Does DeltaCom really believe that retail end users need more time to adjust to price increases from ILECs than to adjust to price increases from CLECs? BellSouth hopes that it need not comment further on this contention by DeltaCom.

Another asymmetric regulation supported by DeltaCom is requiring BellSouth to file each and every CSA with the Commission, while exempting CLECs from that same

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histrionics. In addition, BellSouth's MPFP provides that prices for unbundled network elements and the resale discount will only be adjusted following a hearing by the Commission.

requirement.[8] (*Id.*, at 4) DeltaCom attempts to justify this discriminatory treatment by arguing the potential "to mask anticompetitive off-tariff pricing." (*Id.*) The fundamental misconception in DeltaCom's premise is that BellSouth has any greater propensity to engage in off-tariff pricing than does a CLEC. Such a premise is unsupported and, in fact, unsupportable. Further, nothing in BellSouth's MPFP limits the Commission's ability to investigate any concern regarding a BellSouth CSA. At best, DeltaCom's proposal would simply create a "hit list" of BellSouth CSA's, complete with all of the customer requirements and engineering details that BellSouth used to win the contract. Such a list can then be used by DeltaCom, and others, to approach the pre-qualified and pre-engineered customer to attempt to move the customer out of its contract with BellSouth. Creating such a "hit list" only advantages the CLECs at the expense of BellSouth. Again, this is simply another example of DeltaCom attempting to create unnecessary regulatory impediments to BellSouth's ability to make quick, competitive responses in the local market.

In addition to seeking greater regulatory restrictions on BellSouth, DeltaCom and AT&T propose that the Commission relax certain regulatory restrictions applicable to the CLECs and IXCs. For instance, the CLECs seek: (1) a single day's notice on every tariff they file; (2) the elimination of the prohibition against rendering obsolete any service offering without prior Commission approval; (3) the elimination of the requirement that all IXC or reseller services be available for resale; (4) the elimination of the requirement that prohibits CLECs/IXCs from exiting their service areas without Commission approval; (5) the elimination of the prohibition against geographic deaveraging of IXC and reseller rates without Commission approval; (6) the elimination of the provision requiring CLECs to provide all cost and financial data required by

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[8] Currently, BellSouth files CSAs with the Commission's Telecommunications Division under proprietary seal.

the Commission and the payment of supervision and inspection fees; and, (7) the addition of specific provisions for IXCs and CLECs to offer service and market trials prior to filing tariffs (such trials would presumably be on 1 day's notice). (DeltaCom's Comments, Exhibit A, at pp. 13-14; AT&T's Comments, Exhibit A, at pp. 21-22) BellSouth generally supports any reduction of regulatory restrictions in competitive markets; however, it is instructive as to DeltaCom's and AT&T's true anti-competitive intent that the regulatory reductions sought by the CLECs, which they fail to point out in their Comments, exclude BellSouth. Thus, the Commission should reject the CLECs' attempt to *further* tilt the competitive playing field in the CLECs favor and, instead, it should make any reductions in regulatory requirements apply equally to all carriers operating in Alabama.

DeltaCom also seeks asymmetric (*i.e.*, discriminatory) regulation through the imposition of a so-called *Industry* Code of Conduct that, in typical DeltaCom fashion, applies only to ILECs. This Code of Conduct is yet another undisguised attempt by DeltaCom to have the Commission set protectionist regulatory barriers that serve only to provide DeltaCom, and other Alabama CLECs, with an additional unwarranted and artificial competitive advantage over BellSouth.[9] Thus, the Commission should reject, as anti-competitive and irrelevant, DeltaCom's proposed Code of Conduct. If the Commission, however, is intent on adopting a Code of Conduct for Alabama, BellSouth suggests that any such Code of Conduct be applicable to *all* local exchange companies, such as the Code of Conduct adopted by the Georgia Public Service Commission ("Georgia Commission" or "GPSC").[10]

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[9] BellSouth's business transactions are already governed by extensive detailed rules and regulations imposed by the 1996 Act and the FCC. For example, BellSouth's transactions are subject to 47 Code of Federal Regulations Part 64.901 related to the allocation of regulated/non-regulated costs and Part 53.201 related to affiliate transactions.

[10] See *In Re: Adoption of Proposed Amendments to Utility Rule 515-12-1-.34, Code of Conduct for Winback Activities*, GPSC Docket No. 14232-U, dated March 21, 2003, a copy of which is attached hereto as Exhibit B.

The other major theme of DeltaCom's Comments is that the Commission should not move forward on a price regulation plan until other Commission proceedings have been completed. (*Id.*, at 2-4) This theme of delay...delay...delay is the same tired mantra used by DeltaCom (and other CLECs) during the long distance proceedings and appears to be the only response DeltaCom ever makes when the Commission is considering pro-competitive actions. Frankly, Alabama consumers should not have to suffer any delay in getting more competitive choices at better prices. The harder the CLECs push to maintain the regulatory advantage they have over BellSouth, the more suspicious the Commission should be about the CLECs' motivations. The Commission should pause and ask, "Why are the CLECs scared to compete head-to-head with BellSouth on a level playing field?"

Finally, in its Comments DeltaCom also attacks various provisions of BellSouth's MPFP, stating that, "BellSouth's plan does not address tariff filing requirements, service quality issues, reporting requirements, and interconnection services...." (*Id.* at 5-6) Apparently DeltaCom failed to read BellSouth's proposed MPFP. In BellSouth's July 3, 2003 Petition,[11] each of these issues was addressed in Exhibit 1 to the Petition: tariff filing requirements on page 6 of Exhibit 1; service quality issues on page 10 of Exhibit 1; reporting requirements on page 11 of Exhibit 1; and interconnection services on page 2 of Exhibit 1.

III. BELLSOUTH'S REPLY TO THE COMMENTS OF AT&T

As the Commission is well aware, AT&T did not enter the local market in Alabama until October 30, 2003, less than three months ago. BellSouth is skeptical as to the level of competitive insight AT&T can offer with less than three months' experience in the local market. Nevertheless, BellSouth will address AT&T's Comments.

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[11] *See* Docket No. 28590, *Petition of BellSouth Telecommunications, Inc. for Adoption of Metro Pricing Flexibility Plan*, Dated July 3, 2003.

AT&T begins its Comments by questioning the value of the Commission's efforts in developing and implementing the existing price regulation plan. AT&T contends that there has been no substantial change in the competitive landscape in Alabama and that the competition that has developed is as a result of Total Element Long Run Incremental Cost ("TELRIC") pricing and the availability of the unbundled network element-platform ("UNE-P"), not price regulation. (AT&T Comments, at 2-4) While this may be the excuse AT&T uses for standing on the local market sidelines for almost eight years, the Commission's price regulation plan has allowed numerous other CLECs to enter the local market in Alabama and compete successfully with BellSouth.

The remainder of AT&T's Comments follow two general themes: (1) the Commission should use this proceeding as an excuse to reduce access charges; and, (2) competition has not developed in the Alabama local market. As to the access charge reduction theme, the fallacy of that position is addressed by Dr. William Taylor in his attached report, so BellSouth will not repeat those discussions here. As to the level of competition in the local market, AT&T is simply wrong and, as discussed below, it would be aware of that fact if it spent more time actually competing instead of trying to rely on misguided reports.

On the subject of misguided reports, AT&T's contention that "competition is not of a sufficient level to warrant further relaxation in the form proposed by BellSouth and the Rural LECs" appears to be based solely on a report issued by the Consumer Federation of America ("CFA"). (*Id.*, at 4) Conveniently, AT&T fails to advise the Commission that the CFA Report was eviscerated by an independent rebuttal to that report conducted jointly by the Competitive

Enterprise Institute ("CEI") and the New Millennium Research Council ("NMRC").[12] In their rebuttal report (page 14), the CEI and NMRC conclude (emphasis supplied):

> There is ample evidence that consumers benefit from competition. For this reason, the CFA study should support fair competition and resist attempts (by some) to give advantage to one competitor over another competitor. However, the CFA study does not take a balanced approach to the findings it presents. Instead, the CFA study is fraught with problems. *The study makes errors, misstates facts, plots erroneous data, attempts to discredit claims made by no particular party, and concludes findings on market events that have never occurred. Because it appears to make predetermined conclusions, the CFA study lacks objectivity.*

Again, the Commission should not be persuaded by a discredited CFA report that lacks any empirical evidence of the level of competition in Alabama's local market in BellSouth's service territory. Because the CFA report appears to be the sole basis for AT&T's conclusion that the local market is not competitive, the Commission should simply reject AT&T's argument as being inconsistent with the empirical line loss data presented in BellSouth's Comments.

IV. <u>BELLSOUTH'S REPLY TO THE COMMENTS OF THE NON-BELLSOUTH ILECS</u>

Because BellSouth's proposed MPFP is limited in scope to BellSouth's service territory, BellSouth will attempt to limit these Reply Comments to only those Rural LEC Comments that potentially impact the MPFP. For instance, the Rural LECs contend that compensation issues for various types of traffic (such as ILEC-to-ILEC traffic, Voice over Internet Protocol ("VoIP") traffic, and switched access traffic) must be addressed in any plan adopted by the Commission. (Rural LEC Comments, at 2, 6, and 7) BellSouth contends that none of these inter-carrier compensation issues has any relevance to this proceeding, which is to determine the manner and method by which BellSouth will be allowed to offer competitive alternatives to Alabama

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[12] *See*, <u>Is Phone Competition at the Crossroads? An Analysis of the Consumer Federation of America's Local Competition Study</u>, Competitive Enterprise Institute and the New Millennium Research Council (December 2003), attached hereto as Exhibit C.

consumers for retail telecommunications services. Further, most of these compensation issues are already the subject of existing Commission proceedings.[13]

BellSouth joins in the Rural LECs' concern that the Staff's Plan proposes to freeze rates for certain business and residence competitive vertical services for three years, and then subjects those same competitive vertical services to price increase limitations based both on the current price of the service as well as aggregate increases on the particular Non-Basic category (e.g., Group I or Group II). The Staff offers no justification for proposing such a freeze on Non-Basic, competitive vertical services or the need for per service price increase limitations, and the Commission should reject such a proposal.

There are also a number of issues raised in the Rural LECs' Comments that BellSouth does not necessarily oppose, such as: (1) the fact that interstate switched access rate elements have historically been offset by increases in subscriber line charges ("SLC") (which no longer exists in Alabama) or universal service funding; (2) the Rural LECs' request for a workshop on the adoption of a capacity charge or similar bulk billing mechanism; and, (3) the Rural LECs' request for a cap on special construction costs that would be applicable to all LECs. BellSouth reiterates, however, that the Commission already has ongoing proceedings in which these issues will be, or could be, addressed. Thus, there is no reason for the Commission to transform this docket into a proceeding to address inter-carrier compensation issues, VoIP issues, or universal service issues.

V. BELLSOUTH'S REPLY TO THE COMMENTS OF THE ATTORNEY GENERAL OF ALABAMA

In stark contrast to the Comments of DeltaCom, AT&T, and MCI, the Comments of the Attorney General appear to be pro-competitive and consumer protection oriented, with the

13 For instance, ILEC-to-ILEC compensation is being addressed in Docket No. 28642; VoIP is being addressed in Docket No. 29016; and Universal Service issues are being addressed in Docket No. 25980.

exception of the report of Dr. Marvin Kahn, whose opinions appear to eschew fundamental economic principles and ignore the reality of the existing state of competition in Alabama. Indeed, Dr. Kahn's conclusions appear to be based on an assumption that the Alabama local market is _not_ irreversibly open to competition and that competitive barriers to entry actually exist.[14] These assumptions are expressly contrary to determinations previously made by this Commission and the FCC in the context of BellSouth's long distance applications. Further, Dr. Kahn's detached observations on the current level of competition in Alabama's local exchange market are totally inaccurate due to his reliance on stale and incomplete FCC data.

Notwithstanding Dr. Kahn's views, the Attorney General agrees with BellSouth that changing market conditions necessitate changes to regulatory structures and that BellSouth's MPFP will benefit Alabama consumers, subject to certain modifications. If these modifications were made, the Attorney General notes:

> The MPFP, amended to incorporate the provisions discussed in these comments, would benefit Alabama ratepayers. Ratepayers throughout the state would have the advantage of purchasing a regulated offer of local service or purchasing telecommunications service under the MPFP. *The Attorney General recommends approval of the MPFP and the regulated offer of local service as soon as the regulatory agreement is amended to include the protections for ratepayers discussed in these comments.*

(*Id.*, at 18-19)(Emphasis supplied)

BellSouth met with the Attorney General's Office to discuss the concerns raised on behalf of Alabama consumers. As a result of these meetings, BellSouth and the Attorney General have reached agreement on modifications to the MPFP allowing both parties to support the MPFP. The Amended MPFP reflecting the revisions sought by the Attorney General and agreed to by BellSouth is attached hereto as Exhibit D.

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14 See Report of Dr. William Taylor, at 5.

CONCLUSION

As noted earlier, the Comments filed by DeltaCom, AT&T, and MCI are very instructive. DeltaCom states that "…BellSouth's proposed plan is the most flawed plan currently under consideration by the Commission." AT&T states that "BellSouth's proposal is even more extreme in that it is focused on BellSouth services alone and further because it is based on the false premise that there has been a substantial change in the competitive landscape in Alabama." MCI, while acknowledging that "the competitive landscape in the Alabama telecommunications industry has changed significantly," generally agrees with DeltaCom and AT&T and states that it is time for the Commission to lower some of MCI's costs – irrespective of any impact on universal service. The message of these parties to the Commission is clear – continue to highly regulate BellSouth; impose more regulations, not on the industry, but solely on BellSouth; and remove regulations from the CLECs and IXCs. Contrast what these parties, who focus only on gaming the system, have to say with the Comments of the Attorney General, who focuses only on Alabama consumers:

> 1. The Attorney General agrees that changes in the market for telecommunications services can require changes in the structure of regulation …
>
> 2. The MPFP, amended to incorporate the provisions discussed in these comments, would benefit Alabama ratepayers.
>
> 3. The Attorney General recommends approval of the MPFP and the regulated offer of local service as soon as the regulatory agreement is amended to include the protections for ratepayers discussed in the comments.

BellSouth submits that the recommendation of Alabama's Attorney General, a neutral third party concerned only with the interests of Alabama consumers (not picking marketplace winners and losers), is clearly superior to the recommendations of market participants seeking to stack the "regulatory deck" in their favor through additional government regulation that will only serve to *limit* the choices of Alabama consumers.

The revised MPFP provides for the continued availability of a highly regulated basic telephone service, lighter regulatory oversight of more competitive services, and consumer protections appropriate for a marketplace that is increasingly competitive and yet still regulated. The Commission should decline the CLECs' offer to take a step backwards and, instead, should take a step forward by implementing the MPFP and allowing BellSouth to offer Alabama consumers the pricing and service options that flow from market competition.

Respectfully submitted this 27th day of January 2004.

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COUNSEL FOR BELLSOUTH
TELECOMMUNICATIONS, INC.

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CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing *Reply Comments of BellSouth Telecommunications, Inc.* on all parties of record by placing a copy of same in the United States Mail, postage prepaid, on this the **27th** day of **January, 2004**.

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456099 (certificate)

Exhibit A
APSC 28590
Reply Comments-1/27/04

BEFORE THE
ALABAMA PUBLIC SERVICE COMMISSION

PROPOSED REVISIONS TO PRICE REGULATION AND LOCAL COMPETITION PLAN	))))	**DOCKET NO. 28590**

REPORT OF DR. WILLIAM E. TAYLOR ON BEHALF OF OF BELLSOUTH TELECOMMUNICATIONS, INC.

JANUARY 27, 2004

Exhibit A
APSC 28590
Reply Comments-1/27/04

BEFORE THE
ALABAMA PUBLIC SERVICE COMMISSION

REPORT OF DR. WILLIAM E. TAYLOR

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BEFORE THE
ALABAMA PUBLIC SERVICE COMMISSION

PROPOSED REVISIONS TO PRICE REGULATION AND LOCAL COMPETITION PLAN	))))	**DOCKET NO. 28590**

REPORT OF DR. WILLIAM E. TAYLOR

I. Qualifications

1. My name is William E. Taylor. I am Senior Vice President of National Economic Research Associates, Inc., head of its Communications Practice, and head of its Cambridge office located at One Main Street, Cambridge, Massachusetts 02142.

2. I have been an economist for over twenty-five years. I earned a Bachelor of Arts degree from Harvard College in 1968, a Master of Arts degree in Statistics from the University of California at Berkeley in 1970, and a Ph.D. from Berkeley in 1974, specializing in Industrial Organization and Econometrics. For the past twenty-five years, I have taught and published research in the areas of microeconomics, theoretical and applied econometrics, and telecommunications policy at academic and research institutions, including the Economics Departments of Cornell University, the Catholic University of Louvain in Belgium, and the Massachusetts Institute of Technology. I have also conducted research at Bell Laboratories and Bell Communications Research, Inc. I have appeared before state and federal legislatures, testified in state and federal courts, and participated in telecommunications regulatory proceedings before state public utility commissions, as well as the Federal Communications Commission ("FCC"), the Canadian Radio-television Telecommunications Commission, the Mexican Federal Telecommunications Commission, and the New Zealand Commerce Commission. I have appeared before the Alabama Public Service Commission ("Commission") recently in Docket Nos. 27091, 25835, 15957, and 27989 regarding economic aspects of intercarrier

compensation, service quality penalties, promotional offerings, and structural separations. My vita is attached as Attachment WET-1.

II. Purpose of Report

3. I have been asked by BellSouth Telecommunications, Inc. ("BellSouth") to respond to economic issues raised in the regulatory plans proposed by the Commission Staff and the Rural LECs and in the comments of various parties filed in Docket No. 28590 regarding potential revisions to the current Price Regulation Plan and Local Competition Plan. In addition, I was asked to comment on the Metro Pricing Flexibility Plan proposed by BellSouth.

III. Summary and Conclusions

4. Two economic problems permeate the filings by BellSouth's competitors (ITC^DeltaCom, Inc.["DeltaCom"], AT&T and MCI) and to some extent, the Attorney General's ("AG's") filing. First, they dismiss BellSouth's quantitative measures of current competition for local telecommunications services in Alabama and utterly ignore the effects of regulation, legislation, and technology on the ability of competitors to enter and exit markets in Alabama. Second, notwithstanding the *level* of competition in Alabama markets (about which parties can reasonably disagree), these parties persist in proposing asymmetric regulation in markets which are (indisputably) *open* to competition. This asymmetric regulation takes the form of restrictions on BellSouth's ability—but not the ability of the competitive local exchange carriers ("CLECs") and the interexchange carriers ("IXCs") with which it competes—to bundle services, to price services flexibly according to market conditions, or to change prices or services quickly in response to customer needs, or in other words, on BellSouth's ability to compete effectively.

5. The Staff's Plan offers a complex set of restrictions on annual rate increases for different categories of services and for specific services within those categories. Because BellSouth currently serves a large portion of most local exchange telecommunications markets, such restrictions can severely distort the manner in which market prices move in response to market conditions. Nothing in the evidence regarding Alabama telecommunications markets suggests that these restrictions will cause market prices to

move in directions that market forces would otherwise compel. Adopting such restrictions may seem reasonable: after all, competitive markets rarely exhibit unlimited price increases for individual services or categories of services. Such judgments, however, have no place in markets that have been opened to competition. As the former Chairman of the New York Public Service Commission (and founding father of the field of regulatory economics) said twenty years ago:

> The lesson, in short, was that there was no rational halfway house between thorough regulation and free competition...regulation confronted with competition will have a systematic tendency either to suppress it ... or to orchestrate it and control the results it produces. Why? Because competition is unpredictable and messy, and the regulator prizes predictability and tidiness. Businesses move in and out of competitive markets. They are constantly changing their product and service offerings, schedules, and prices. The regulator, in contrast prefers continuity of service and stability and uniformity of prices and services offerings...[and] can't trust the market and free entry to satisfy economically legitimate demands.[1]

Arbitrary smoothing of price changes—and changes in other conditions of service offerings—is dangerous regulation in the presence of competition.

6. The AG proposes a different set of price constraints on "a regulated offer of local telephone service" (AG Comments, at 12, and AG Comments, Appendix A, at 11), whose parameters appear to be derived from a purported total factor productivity study for BellSouth Alabama. That study does not measure total factor productivity growth in any sense known to economists, and the AG's consultant's conclusion that the price constraints are reasonable in light of these productivity calculations is unfounded.

7. Finally, predictably as mushrooms after rain, the CLECs formerly known as IXCs (AT&T and MCI) take this opportunity to ask the Commission to reduce intrastate carrier access charges, this time to cost as defined by Total Element Long Run Incremental Cost ("TELRIC"). Such pricing is not required for economic efficiency,[2] and it has no effect on the fostering of efficient competition. Carriers who purchase access services from

[1] Alfred E. Kahn, "The Uneasy Marriage of Regulation and Competition," *Telematics* September 1984 at pp. 8-9.

[2] Indeed, the FCC has recently opened a docket in which it questions the wisdom of the current TELRIC methodology.

BellSouth are not placed at any competitive disadvantage relative to BellSouth because (i) BellSouth's long distance affiliate buys carrier access under the same prices, terms, and conditions as competing providers, and (ii) elementary economics shows that BellSouth gains no additional ability to compete for long distance customers because it also sells carrier access to competitors at a (regulated) price above cost.

8. My testimony is organized into five topic areas: (i) the extent of competition in Alabama telecommunications markets, (ii) the regulatory asymmetries proposed by other parties and their pernicious economic effects, (iii) the price cap regulation proposed by the AG and the purported productivity study that supports it, (iv) the economic case for and against pricing carrier access charges above some measure of regulated cost, and (v) an evaluation of the BellSouth Metro Pricing Flexibility Plan in comparison with that proposed by the Staff.

IV. The State of Competition

9. The CLECs and the AG all minimize the evidence of competition in Alabama telecommunications markets provided in *BellSouth's Comments*[3] in this Docket. BellSouth's unchallenged numbers indicate that actual competition — however measured — is significant and rapidly increasing. CLEC shares of lines exceeded 20 percent in November 2003. As CLECs have focused their marketing on business customers, their share of business access lines is about 33 percent, compared with 14 percent of residence lines. Since December 2001, CLEC lines have grown at an annual rate of about 35 percent, despite the sharp reductions in aggregate telecommunications demand. In contrast, according to BellSouth's ARMIS Report, its switched access lines in Alabama fell for the first time in history in 2001 (compared with 2000), fell again in 2002, and again in 2003.

10. Competition for retail usage services (local and toll calling) has had an even larger effect on BellSouth, as competition for usage comes both from CLECs who sell combined local and long distance service packages and from wireless carriers whose unlimited usage packages attracts usage customers who still retain wireline local

[3] *Proposed Revisions to Price Regulation and Local Competition Plan*, Docket No. 28590, Comments of BellSouth Telecommunications, Inc., January 6, 2004 (*BellSouth Comments*").

exchange service. Figure 1 shows the pattern of declining volumes of demand for BellSouth Alabama's switched access lines and usage during the 1996-2002 period.

11. Dr. Marvin Kahn, the AG's consultant, (not to be confused with Dr. Alfred Kahn, cited below) observes (at 6) that just because markets are open to competition does not mean that they are necessarily competitive. This observation, however, ignores the fact that if markets are open to competition *and there are no significant barriers to entry*, then no firm in the market can exercise market power by pricing above the competitive market level. Such prices would lead to higher profits, which, in the absence of entry barriers, would attract new entrants who would compete away any profits that exceeded the competitive level.

12. In economics, such markets are called "contestable." A contestable market is one in which the sunk costs of entry and exit are so low that attempts by a dominant incumbent firm to exercise market power (by profitably raising the market price above competitive levels) invariably fails.[4] This happens because competing firms (even those with relatively "small" market shares), unimpeded by significant entry or exit-related sunk costs, can conduct "hit-and-run" entry and force the market price down. Any supra-competitive price set by the incumbent sends a signal that there are economic profits to be made by slightly undercutting the incumbent's price, and the easy entry conditions allow opportunistic competitors to do just that. As the fringe competitors undercut the incumbent's price and add to the total market supply of the good or service, the market price itself starts to fall and, in the process, dissipates the economic profits (to the incumbent and competitors alike) made possible by the initial increase of price. Eventually, easy entry by the competitive fringe forces the market price down to the competitive level, and leaves the dominant incumbent powerless to raise the price or collect excess economic profits.[5] Without sunk costs to worry about, the opportunistic

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[4] For a comprehensive treatment of the economic theory of contestability (as the most meaningful notion of competition in capital-intensive industries with significant economies of scale and scope), *see* William J. Baumol, John C. Panzar, and Robert D. Willig, *Contestable Markets and the Theory of Industry Structure*, revised edition, New York: Harcourt Brace Jovanovich, 1988.

[5] The fact that entry must be easy is paramount here. This is equivalent to a high elasticity of supply of the competitive fringe. Without easy entry, competitors could not take aim at the incumbent's supra-competitive price, raise industry supply, and force the price down eventually. For entry to be easy, potential competitors must not be deterred by high upfront and, more importantly, sunk costs.

competitors can even exit the market and pocket the profits made possible by their arbitrage-like actions in the market. Furthermore, the very threat of re-entry by those competitors can dissuade the dominant incumbent from attempting to exercise market power again.[6]

13. In addition to economic theory, antitrust case law supports the view that market power is absent in a market that is essentially contestable:

> Market power comes from the ability to cut back the market's total output and so raise price; consumers bid more in competing against one another to obtain the smaller quantity available. When a firm (or group of firms) controls a significant percentage of the productive assets in the market, the remaining firms may not have the capacity to increase their sales quickly to make up for any reduction by the dominant firm or group of firms. In other cases, however, a firm's share of current sales does not reflect an ability to reduce the total output in the market, and therefore it does not convey power over price. Other firms may be able, for example, to divert production into the market from outside. They may be able to convert productive capacity to the product in question or import the product from out of the area. If firms are able to enter, expand, or import sufficiently quickly, that may counteract a reduction in output by existing firms. And if the current sales are not based on the ownership of productive assets—so that the entrants do not need to build new plants or otherwise take a long time to supply consumers' wants—the existing firms may have no power at all to cut back the market's output. To put these points a little differently, the lower the barriers to entry, and the shorter the lags of new entry, the less power existing firms have. When the supply is highly elastic, existing market share does not signify market power.[7]

14. The Telecommunications Act of 1996 ("the 1996 Act") established the foundation for making local exchange telephone markets contestable. The three modes of competitive entry established by the 1996 Act and implemented by the FCC and this Commission have removed network sunk costs and legal and regulatory constraints as potential barriers to entry into local exchange markets. Resale is a mode of entry that

[6] For a treatment of the "dominant incumbent, competitive fringe" model with implications for competitors' ability to restrain the incumbent's pricing behavior, *see* W. Kip Viscusi, John M. Vernon, and Joseph E. Harrington, Jr., *Economics of Antitrust and Regulation*, 2nd edition, Cambridge, MA: The MIT Press, 1996, at 164-166.

[7] *Ball Memorial Hospital v. Mutual Hospital Insurance, Inc.*, 784 F.2d 1325, 1335 (7th Cir. 1986). The last sentence in this excerpt—that the supply elasticity of the competitive fringe has an inverse relationship with market power—is significant because in shows that considering market share in isolation is neither helpful nor reliable for assessing whether a dominant firm possesses market power.

minimizes entry-related risks for the competitor and requires it to incur almost no sunk costs at all. The availability of leased unbundled network elements ("UNEs") at TELRIC-based (regulated) rates means that the relatively more adventurous form of entry using those facilities requires competitors to commit to few, if any, sunk costs of their own.[8] Rather, all the risks associated with sunk network costs are borne by the incumbent local exchange carrier ("ILEC") that is obliged to lease its network facilities, while the benefits of productivity and efficiency gains (such as from economies of scale and scope) are passed on to competitors in the TELRIC-based rates they pay. Only when competitors invest in their own facilities are they obliged to take on sunk costs of their own. Thus, CLECs need incur no sunk costs and risk of owning or constructing network facilities and can engage in hit-and-run entry where they perceive market conditions to be favorable.

15. The regulation of BellSouth's wholesale services under the terms of the 1996 Act and under the jurisdiction of this Commission has greatly reduced barriers to entry into the provision of retail local exchange services since 1995 when the Alabama Price Regulation and Local Competition Plan originally went into effect.[9] As acknowledged by the FCC, the Department of Justice, and this Commission,[10] local exchange markets are effectively and irreversibly open to competition in Alabama, which means that it is now appropriate to relax the regulation of retail local exchange services. A few years ago, Professor Alfred Kahn explained why regulation of wholesale services—*e.g.*, UNEs and resale—under the 1996 Act calls for deregulation of retail services:

> ... the obligations imposed on the ILECs by the Telecommunications Act and complementary state policies have come as close as conceivable to making the provision of telephone services *at retail* perfectly contestable

[8] For example, the Unbundled Network Element – Platform ("UNE-P") is the equivalent of reselling the ILEC's basic exchange service. The CLEC does not need to invest in any network capacity in order to provide local exchange service via UNE-P.

[9] This Commission took action to open Alabama's local telecommunications markets to competitive entry prior to Congress passing the 1996 Act.

[10] IN RE: Petition for Approval of a Statement of Generally Available Terms and Conditions pursuant to §252(f) of the Telecommunications Act of 1996 and Notification to File a Petition for In-Region InterLATA Authority with the FCC Pursuant to §271 of the Telecommunications Act of 1996, Docket No. 25835, Order Dated July 11, 2002; and, In the Matter of Joint Application by BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc. for Provision of In-region, InterLATA Services in Alabama, Kentucky, Mississippi, North Carolina and South Carolina, Memorandum and Order, WC Docket 02-150 (September 18, 2002).

> *and therefore regulation of the retail rates simply unnecessary.* What these provisions do, at the extreme, is to reduce the sunk costs associated with entry into retailing *close to zero...*
>
> The implications of this new situation are, nevertheless, dramatic. What it means, specifically, is that the typical requirements in governing statutes or regulations for reclassifying the entire range of *retail* local telephone services as competitive *will*, as a matter of economics, *be satisfied by these rules.* In these circumstances, deregulation of the retail operations of the ILECs becomes not just possible but mandatory. Effective competition demands that they have the identical freedom to compete at that level as is now enjoyed by their competitors...[11]

His observation clearly applies to BellSouth in Alabama today.

16. Several parties criticize particular aspects of BellSouth's competitive market showing. First, AT&T cites low CLEC market shares for residential and small business customers in Alabama, taken from a Consumer Federation of America ("CFA") publication,[12] based, in turn, on the FCC's Local Competition Report, containing data as of December 2002. As I pointed out above, current market shares do not determine the extent of market power, where, as in Alabama, there are no significant barriers to entry into the market. That is, a high share of access lines does not carry with it the ability to raise prices profitably above the competitive market level. In addition, as the FCC Report recognizes, reporting of data is only mandatory for carriers having at least 10,000 switched access lines, so that the FCC counts of CLEC lines in Alabama significantly underestimate the actual number of CLEC lines.[13]

17. While undercounting the number of CLEC lines, the FCC survey does provide a more accurate estimate of the growth of CLEC access lines. In Alabama, CLEC end user access lines increased at an annual rate of 56 percent between December 2002 (the data cited by AT&T and the CFA) and June 2003 (the most recent FCC data, released in

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[11] Alfred E. Kahn, *Letting Go: Deregulating the Process of Deregulation*, Michigan State University Institute of Public Utilities, 1998, pp. 56-58, footnotes excluded.

[12] *See*, Is Phone "Competition at the Crossroads?": An Analysis of the Consumer Federation of America's Local Competition Study, December 2003, by the Competitive Enterprise Institute and the New Millennium Research Council, for rebuttal to AT&T's contention.

[13] For example, the FCC Local Competition Report [Table 10] shows 234,330 CLEC access lines in all of Alabama — including both BellSouth and independent telephone company serving territories — as of June 30, 2003. BellSouth reports 362,755 CLEC access lines in its territory alone in June 2003. [*BellSouth Comments* at 20]

December 2003). Similarly, the percentage of zip codes in Alabama having no CLEC participation fell from 37 percent in the survey cited by AT&T to 33 percent 6 months later. The percentage of zip codes having 6 or more CLECs grew from 8 percent in AT&T's numbers to 13 percent 6 months later.

18. Second, the AG's consultant concludes that "the market for residential and small business services is not competitive," purportedly based on the December 2003 FCC survey data (reflecting counts as of June 2003) augmented by some assumptions. The basic numbers in Dr. M. Kahn's Table 1 are problematic, however. First, they purport to apply to residential and small business switched access lines in BellSouth's service territory in Alabama and to derive from the FCC's Form 477 as of December 2002.[14] The numbers in Table 1, however, are inconsistent with the summary data released in the FCC's Local Competition Reports. For example, the number of Coax lines in Table 1 are precisely 50 percent of the CLEC-owned lines for all of Alabama as reported in the December 2003 Local Competition Report. These lines pertain to all of Alabama (not just BellSouth territory) and to June 2003, not December 2002. In addition, the number of Resold Lines reported in Table 1 significantly exceeds the number of Resold Lines reported for all customers (not just BellSouth customers and not just residential and small business customers) throughout Alabama in both the June and December 2003 surveys. On the other hand, the UNE numbers are much smaller than those reported in the FCC Reports for all of Alabama, even after accounting for Dr. M. Kahn's assumption that only one-third of UNE-L lines serve residential and small business customers. Dr. Kahn's claim (at 6) that "the FCC reports that in June 2003 only seven CLECs were operating at material volumes in Alabama" is incorrect. As of June 30, 2003, the FCC Local Competition Report released in December 2003 states that nine (9) CLECs reported activity in Alabama, increasing from seven as of December 31, 2002.[15]

[14] Dr. Kahn acknowledges that the FCC threshold for including a CLEC in the FCC's semi-annual local competition report is that it [a CLEC] provide at least 10,000 lines. Dr. Kahn goes on to dismiss such CLECs as "not very active" or "not very successful." *See*, AG's Comments, Exhibit A, at 6. Apparently, Dr. Kahn feels this is sufficient justification for him to develop market share numbers that do not reflect the realities of today's local telecommunications markets in Alabama.

[15] FCC, "Local Telephone Competition: Status as of June 30, 2003," (released December 2003) at Table 12. FCC, "Local Telephone Competition: Status as of December 31, 2002," (released June 2003) at Table 12.

19. Dr. Kahn includes the competitive effect of wireless phones in Table 1 by counting as competitive access lines, 3 percent of households, reflecting survey data showing that 1.2 to 5 percent of households use wireless phones as their only phone. The FCC's Sixth and Seventh Reports consistently cite analyst estimates that 3 to 5 percent of wireless customers use their wireless phones as their only phones:

> While firm data is difficult to come by, analysts estimate that 3 to 5 percent of wireless customers use their wireless phones as their only phone. Though these estimates indicate that relatively few wireless customers have "cut the cord" in the sense of canceling their subscription to wireline telephone service, there is growing evidence that consumers are substituting wireless services for traditional wireline communications. One analyst claimed that 20 percent of residential customers had replaced "some" wireline phone usage with wireless, and that 11 percent had replaced a "significant percentage. According to a USA Today/CNN Gallop poll, almost one in five mobile telephony users regard their wireless phone as their primary phone.[16]

20. Irrespective of the number, this approach makes no economic sense. First, wireless phones obviously compete with wireline phones even if they are not the only method a household uses to obtain telephone service. Wireless phones substitute for second lines, particularly so-called "teen lines," where a wireless second line has more attractive characteristics than an additional fixed wireline. Equally important, wireless phones substitute for high-margin wireline usage—namely local and toll calling. In a series of annual reports, the FCC has tracked this trend, finding in 2003 that "For the average household, wireless represents 27 percent of total telecommunications expenditures."[17] Citing various industry analyst reports, the FCC observes that

> The long distance, local and the payphone segments of wireline telecommunications have all been losing business to wireless substitution. Long distance volumes and revenues are down at AT&T, MCI and Sprint as customers shift to wireless services to make their calls. Verizon, SBC

[16] *In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 and Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, WT Docket No 02-379, Seventh Report ("Seventh Wireless Report"), released July 3, 2002 at 32.

[17] *In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 and Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, WT Docket No. 02-379, Eighth Report, released July 14, 2003, ("Eighth Wireless Report") citing a survey of telephone bills of 32,000 households for the third quarter of 2002. "TNS Telecoms Data ranks Verizon the Third Largest Long Distance Provider in the U.S., Surpassing Sprint," News Release, TNS Telecoms, January 7, 2003.

> and BellSouth saw business and consumer access lines fall 3.6, 4.1 and 3.2 percent, respectively, in 2002, for a total decrease of 5.5 million lines, with wireless substitution being a significant factor.[18]

Similar discussions occur in the FCC's Sixth and Seventh Reports, covering earlier time periods back to 2000.[19] Thus, even if households in Alabama retain a wireline phone, wireless services compete for both access lines and usage and must therefore be considered in any proper assessment of BellSouth's purported market power for local exchange service.

21. Third, AT&T complains that BellSouth is opposing UNE-P-based competition in the FCC's Triennial Review cases, and thus that "the Commission's current review of the Price Regulation rules take account of that environment." [at 5-6]. Of course, the FCC and this Commission will only permit unbundled switching to be exempted from TELRIC pricing once it is shown that CLECs are not "impaired" by not being able to lease unbundled switching at TELRIC prices. The FCC has outlined the following criteria for determining whether there is impairment:

> We find a requesting carrier to be impaired when lack of access to an incumbent LEC network element poses a barrier or barriers to entry, including operational and economic barriers, that are likely to make entry into a market uneconomic.[20]

By these criteria, if UNE-P ceases to exist at some point because a component UNE, e.g., switching, is declared to be available under conditions of no impairment, then it does not mean that CLECs would somehow be left unable to compete.[21] Rather, switching would be declared to be no longer a UNE precisely when there is no danger — in the opinion of

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[18] *Id.*, ¶ 103, footnote citations omitted.

[19] *See* Sixth Report (released July 17, 2001) at 32-34 and Seventh Report (released July 3, 2002) at 32-35. (Same citations as the Seventh and Eighth Reports).

[20] *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers* (CC Docket No. 01-338), *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996* (CC Docket No. 96-98), *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability* (CC Docket No. 98-147); Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, FCC 03-36 (released August 21, 2003) ("Triennial Review Order" or "TRO") at ¶ 84.

[21] AT&T fails to acknowledge that if any state commission finds that a CLEC is "not impaired" by not being able to lease unbundled switching at TELRIC prices, CLECs will have a significant transition period in which to migrate from UNE-P to UNE-L.

this Commission — that CLECs would cease to be competitive without being able to acquire the desired facility as a UNE.

V. Regulatory Asymmetry

22. The only reason the Alabama Public Service Commission currently regulates the rates and other terms and conditions of services of BellSouth's telecommunications services is because it believes BellSouth retains some ability to control prices in some of those markets. The facts outlined in the previous section imply that such regulation is no longer necessary. Even if the Commission disagrees with some of the conclusions I draw from that evidence, there can be no disagreement that those markets have been *opened* to competition. Irrespective of the level of competition, once there are competitors in the market, regulation must be actively and zealously impartial with respect to each competitor — incumbents and entrants alike. Consumers will not be better off if the Commission intentionally or inadvertently sets the rules of engagement to favor particular firms or particular technologies. In the U.S., we generally believe that the forces of competition rather than the government best determine winners and losers among firms, among products, and among technologies. Hence, to the extent regulation of telecommunications services continues in Alabama, it should protect consumers from the possible exercise of residual market power, but it should not protect entrants or incumbents from competition.

23. To that end, once the regulator is satisfied that consumers are protected from the exercise of market power, whatever additional regulation remains must be <u>symmetric</u> among all firms in the market. Even small differences in rules can have large and unpredictable effects. Look at the mix of truck, rail, barge, and airplane transport of freight in the U.S. today. That mix stems from generations of asymmetric regulatory decisions, and, whatever you think of the outcome, it is surely different from that which competitive forces would have produced in unregulated markets. Among telecommunications services, the problems are greater because technology changes faster and more radically. Are consumers better served by wireless or wireline voice services? By circuit-switched or packet-switched networks? By many small firms sharing one wireline network or by several interconnected wireline networks? In unregulated or

symmetrically-regulated markets, customer choices will move the industry in the directions that consumers prefer, determining the firms, the technologies, and the market structure that best serves consumer needs. Asymmetric regulation distorts that outcome in largely unpredictable ways, but ones which no longer reflect the preferences of consumers.

A. Promotions

24. Promotions — limited offerings of goods or services at more attractive terms — are a staple form of competition in unregulated markets. Consumers are made better off because firms lower prices to encourage shopping around; if promotions were forbidden, prices would be higher, and consumers would find it more difficult to try competing products.

25. DeltaCom proposes a specific set of rules for promotions, some of which would apply equally to CLECs and ILECs. These common restrictions take the form of detailed filing requirements, limits on the frequency and duration of promotions, and price floors. The Staff Report (at 5-6) similarly lists restrictions on promotions and Contract Service Agreements ("CSAs") that are worded to be carrier (ILEC/CLEC) neutral. From a simplistic perspective, to the extent that these rules apply equally to ILECs and CLECs, questions of regulatory asymmetry do not arise.

26. Nonetheless, it is worth pointing out the importance of applying restrictions equally to all competitors:

- In order for one firm to meet another's competitive offering, it must have the same flexibility to fix the schedule and terms of its promotions. Otherwise, asymmetric competition will arise and the outcome of the process will not be determined by the merits of the competitors.
- Restrictions on duration and frequency of promotions would mean that BellSouth would offer fewer of them. Competitors, then, would have to respond to fewer BellSouth promotions, and the vigor of price competition in Alabama would be reduced.

As the Florida Public Service Commission recently found

> BellSouth should have the same flexibility as competitors do to choose the frequency of its promotions. We believe that limiting BellSouth to

> offering its promotional tariffs for 120 days would not only limit customer choice, but restrict BellSouth's right to meet competitive offerings...[22]

27. Restrictions on the duration and frequency of promotions and the introduction of price floors, however, — even restrictions and floors that apply to everyone —are anticompetitive, in the sense that they reduce the degree of price competition among ILECs and CLECs. All competitors should be free to offer limited term price reductions to particular classes of customers, and restrictions on this ability cannot benefit customers. Similarly, price floors are a dangerous tool in markets opened to competition, since every competitor would appreciate the Commission's help in preventing reductions in the market price. Thus, symmetry aside, these regulations will diminish the vigor of price competition in the market which is the opposite of the policy the Commission and consumer advocates should favor.

28. From an economic perspective, DeltaCom's proposed price floor is particularly dangerous. Price floors based on UNE prices are wrong in principle because the TELRIC-based prices for UNEs include an element of contribution towards common costs, which does not belong in an economically efficient price floor. The use of the retail price less the avoided cost discount as a proxy for the UNE price is also incorrect because the retail price less the avoided cost discount does not — even in principle — approach the long run incremental cost ("LRIC") or total service long run incremental cost ("TSLRIC"), which form the basis for the economically efficient price floor. Finally, generic price floors can inhibit efficient price competition because their cost basis is inherently inaccurate. Services that are sold to particular customer classes under particular terms and conditions can have incremental costs that differ from the cost studies that are averaged over all customer classes and all geographic areas of the state.

29. A more serious problem is that the force of these proposals, while billed as applicable to ILECs and CLECs, is not symmetric between ILECs and CLECs. One must remember that CLECs don't necessarily need the ability to offer promotions. CLEC tariffs are not based on a requirement to serve all customers, nor are their prices regulated to the degree that ILEC prices are regulated or regulated with the intent that certain

[22] Florida Public Service Commission, Order No. PSC-03-0726-FOF-TP, Final Order on BellSouth's Key

services and customers should subsidize other services and customers. Without these requirements or objectives and with the ability to serve only those markets and customers that they choose, CLEC tariffs accomplish exactly what an ILEC promotion would be designed to do – selectively target certain customers and/or certain geographic segments of the total market.

30. Another example of an asymmetric regulation would be Section 3 which prevents ILECs from responding immediately by offering a promotion or CSA to a CLEC customer if the CLEC has submitted a local service request to use the ILEC's UNEs. There are already restrictions on the ILEC's use of such information for retail marketing. Moreover, when customers change suppliers, they notify their current carrier irrespective of whether that carrier is an ILEC or a CLEC. Hence, there is no asymmetry in the information available to ILECs and CLECs that would justify the proposed restriction.

31. The proposed asymmetric treatment of CSAs is not warranted. The requirement of Commission approval and prior filing of CSAs makes negotiation of contract terms with a customer unwieldy, since the ILEC cannot unilaterally commit to prices, terms, and conditions. Further, the requirement to resell CSAs does not mean that the Commission or CLECs must be notified instantly of every CSA the ILEC chooses to offer, since in unregulated markets, firms are not notified of contracts that customers sign with other suppliers.

32. Finally, the AG (at 17) would require all promotions (as well as bundled service offerings) to be available "throughout the state to all customers in all geographic areas and all wire centers." It is unclear whether this applies to both ILECs and CLECs (unlikely since CLECs have no obligation to serve), but because the ILEC faces more stringent filing requirements, its affect on ILECs will be greater than that on CLECs. The proposed rule appears to prevent promotions aimed at particular customer groups (*e.g.*, high-volume customers, customers who have recently left the ILEC), particular geographic areas (*e.g.*, high density areas where the large number of potential customers can justify investment), and particular wire centers (*e.g.*, wire centers where customers have many alternative services available)

Customer Tariffs, ("Florida Key Customer Order") June 19, 2003 at 30.

33. Such a proposal would have the unintended effect of reducing the incidence of promotions and price competition in Alabama. As the Florida Commission recently found

> it would be unwise to adopt a rule requiring that if a provider discounts to some customers it must discount to all. That type of activity may produce results which would harm rather than help competition....if we were to adopt a policy of requiring discounts to be applied to all wire centers, it may have the effect of perpetuating one dominant carrier in the wire centers where the offerings are not now available. If competitors cannot come in when the dominant provider is charging higher prices, they probably are not going to come in and compete in those wire centers at a lower price.[23]

All firms would like to compete in a regime where the ability to compete on price is restricted because it would reduce the incentives of firms to compete by cutting price. On the other hand, consumers are better off when firms are free to reduce price wherever they find it profitable to do so.

B. Price Floors

34. The Staff, the AG, AT&T, and DeltaCom each recommend the imposition of price floors on ILEC services. As the intention of a price floor is to prevent anticompetitive pricing on the part of a dominant firm, no price floors are proposed for CLECs.

35. In economics, it is recognized that no firm will knowingly and voluntarily charge a price for a unit of service below the incremental cost of providing that unit of service. Of course, that incremental cost might be very different in specific circumstances: for example, the short-run incremental cost of a firm facing excess capacity could be much lower than its long run cost. Also, pricing below cost in the short run can be part of a profitable, procompetitive long-run strategy: low introductory prices for a service is an example. But aside from these circumstances, there is an anticompetitive pricing strategy (predatory pricing) that price floors were constructed to prevent: persistently pricing below actual incremental cost when the only way the price could be profitable would be if (i) competitors were forced to leave the market, and (ii) the firm could then raise prices sufficiently to recoup the profit it had lost without attracting re-entry. Current economic

[23] Florida Key Customer Order at 16

thinking downplays the likelihood of such strategies because the circumstances in which they could be profitable are unlikely: without barriers to entry, recoupment is impossible. And a strategy in which a firm harms itself as well as others, even if profitable, is probably less profitable than other legitimate ways of competing.

36. Thus, price floors are generally not necessary to prevent anticompetitive pricing. Worse, they can be harmful to consumers. The Commission (and consumers) welcome lower prices and should view with suspicion any attempt to induce regulators to prevent firms from reducing their prices. In addition, regulatory price floors are blunt instruments; they rarely take into account the specific circumstances of the particular unit of service for sale, and thus, they can prevent price reductions that are legitimate competitive responses.

37. The Staff proposes price floors for ILEC services at TSLRIC or the sum of the constituent UNEs that make up the service, whichever is higher. DeltaCom proposes the same floor for promotional prices. AT&T concurs but objects to the Staff's proposal to permit ILEC pricing below the floor in response to a competitor's offering. The AG, on the other hand, proposes a LRIC price floor for all services.

38. If a price floor is deemed necessary, the floor that distorts competition the least is short-run marginal cost (i.e., the cost of the next unit of service, ignoring capacity costs). For a tariff filing — a price that will persist in the market for some period of time — a more accurate price floor would be LRIC, a price that would recover all of the costs of supplying additional units of service. If there are significant fixed costs associated with supplying the service, pricing at LRIC will not recover those costs, even though, at the margin, pricing each unit of the service at LRIC would still be profitable. Thus, economists generally recommend that price floors be set so that individual units of service be priced at or above LRIC, but that in the aggregate, each service must also recover its service-specific fixed costs. Thus, on average (across all components of a service), prices must equal or exceed TSLRIC, but individual service prices may fall below TSLRIC if they remain at or above LRIC.

39. Thus, the TSLRIC part of the price floors proposed by the Staff, AT&T and DeltaCom can be anticompetitively high: that is, they could prevent BellSouth from

pricing some components of a service (*e.g.*, off-peak toll calling) at low rates that still exceed the relevant economic cost. Such pricing would be procompetitive, not anticompetitive, and the Commission should encourage, rather than discourage, such prices.

40. Worse, the Staff, AT&T, and DeltaCom price floors are set at the maximum of TSLRIC and the constituent UNE prices. Assume (for the purpose of avoiding argument) that UNEs were priced at TELRIC and that the elements of the TELRIC study were the same as those of a proper TSLRIC study. The prices at which the UNEs were sold would exceed the TSLRIC of the service because one component of TELRIC is missing from TSLRIC, namely the share of the common costs of the enterprise. Thus, in concept, a UNE-based price floor is too high. Moreover, the fact that some CLECs buy UNEs to compete against the service is no argument for a UNE-based price floor that exceeds the ILEC's LRIC. Price floors should be based on costs, not on levels that permit particular types of entrants to be profitable. Cable telephony providers make no use of ILEC UNEs. If a cable company prices below the ILEC, should the ILEC be prevented from lowering its price (above its LRIC) to compete simply because UNE-based competitors couldn't match that price?

41. Finally, the fact that price floors are explicitly asymmetric, restricting only the ILEC, means that they can have an important effect on the dynamics of competition in the industry. It's one thing to impose an inefficient but competitively-neutral policy. It is quite another to adopt an inefficient policy that only affects one type of competitor.

C. Bundling

42. The AG correctly notes that consumers value the ability to purchase bundles of services. Firms also find it profitable to sell such packages because it allows them to tailor different offerings to customers having different preferences. For example, high-usage customers value a package of local service and unlimited toll and local calling more than low-usage customers. Based on this information, firms can offer packages that give customers a wide choice of options so that customers are better off while network usage and revenues increase.

43. On the other hand, the AG's consultant raises a number of issues and proposes asymmetric solutions that, if adopted, would eviscerate this source of consumer benefit from ILECs and — since it only applies to ILECs — would distort the competitive process in Alabama's telecommunications markets. In particular, the AG appears concerned that terms and conditions of bundled service offerings that include both regulated and non-regulated services would not have the same consumer protections that apply to the individual regulated services. Exhibit A to the AG's comments cites billing, service quality, contract terms (at 22), and cost information for price floor calculations (at 23). To provide "market protections," the AG proposes that a PSC "forum" be established to adjudicate "disputes between consumers or competitors and any ILEC whenever the regulated service is part of any service package." (at 24-25) Such a process would be unnecessary, unworkable, and anticompetitive.

44. Additional restrictions on bundles of regulated and unregulated services are <u>unnecessary</u> because consumers don't have to buy them. If the billing arrangements, service quality, or contract terms are not satisfactory, the customer can always buy the constituent services separately. In that sense, the market for the bundled services is always competitive because irrespective of CLEC offerings, customers can always substitute the individual service offerings of the ILEC if they don't like the terms, conditions, or price of the ILEC's package. Thus, regarded as a separate service, a package would not ordinarily be regulated by this Commission, and the consumer and competitor protection standards that would apply to packages would be the same ones that apply to unregulated services.

45. Whatever the function and procedures of the AG's proposed forum, it would be fundamentally <u>unworkable</u>. Competitors have every interest in learning about BellSouth's proposed package plans before they are offered and every incentive to delay and restrict their implementation. Customers are not obliged to buy the package in order to receive its full functionality, so if they don't like its terms and conditions, they do not need a forum at which to air their grievances. Rather, they can vote with their dollars, substituting other ILEC services — as well as CLEC services — for the packaged

offering. The appropriate level of consumer protection the Commission should provide is thus the level that it provides for unregulated services.

46. Finally, if the AG's forum had teeth, it would be anticompetitive. A regulatory process that slows and limits the incumbent's — but not the entrants' — ability to package services in ways that customers want systematically biases the resulting competition against the incumbent. In my youth, the incredulous question "does Macy's tell Gimbel's?" indicated the value that firms place on knowing the plans of their competitors. A forum in which Wal-Mart would have to reveal, discuss, and negotiate its plans with Target in the room would be an unthinkable, anticompetitive intrusion into the competitive process.

D. Codes of Conduct

47. DeltaCom's proposed rules include in its Miscellaneous Provisions, an ILEC Code of Conduct that essentially seeks to regulate transactions, information flows, and customer referrals between ILECs' wholesale and retail divisions and between the ILECs' operating companies and affiliates. It is my understanding that these matters are currently controlled by FCC and this Commission's rules, and nothing but ambiguity and confusion would arise from adopting a different expression of the same ideas.

48. Worse, DeltaCom's proposed Code of Conduct imposes needlessly asymmetric regulation on BellSouth because it only restricts ILEC behavior. If there is thought to be a need to be more explicit about these matters, it is perfectly straightforward to write such rules symmetrically. Indeed, such rules have already been written. DeltaCom's rules are quite similar to a Code of Conduct adopted for carrier winback activities in Georgia, except that the Georgia Code is carefully constructed to be absolutely competitively neutral.[24] That Code applies today to BellSouth and DeltaCom in Georgia and would impose no additional hardships on those companies if it were to apply in Alabama. In contrast, DeltaCom's proposal for Alabama would only restrict ILECs and place no symmetric obligations on DeltaCom or other CLECs.

[24] *In Re: Adoption of Proposed Amendments to Utility Rule 515-12-1-34, Code of Conduct for Winback Activities*, Docket No. 14232-U, Order of the Georgia Public Service Commission effective March 18, 2003.

E. General Terms and Conditions

49. In some instances, DeltaCom and AT&T have proposed, although not directly, that the Commission reduce Commission oversight on their offerings. For example, DeltaCom and AT&T request:

- Tariff changes effective on one day's notice to the Commission.
- The elimination of the prohibitions against various changes without prior Commission approval, including geographic price deaveraging, eliminating services or making them obsolete, and exiting service areas.
- The elimination of the requirement that their services be available for ordinary resale.
- The elimination of the requirement to provide cost and financial data required by the Commission and to pay supervision and inspection fees.

To the extent these requests make sense for CLECs in current Alabama telecommunications markets, they also make sense for ILECs. In adapting the stringency of its regulatory authority to the changed circumstances in telecommunications, the Commission should not make the mistake of increasing the regulatory disparity of treatment of entrants and incumbents in ways that have no bearing on the control of market power.

VI. Price Regulation

50. Disagreeing with BellSouth's assessment of the competitive nature of telecommunications services in Alabama, the Staff and the AG both propose continued regulation of the prices charged by BellSouth. It is axiomatic in economics that once markets are sufficiently competitive that no firm possesses market power, then consumers are best served by a removal of regulation, including regulation of prices. The reason is simple. Unregulated prices in these markets will move by market forces to their competitive market levels, and regulation — even if omniscient — could do no better for customers than to impose such prices. Telecommunications services are produced by multi-product, multi-service firms having technologies characterized by a high proportion of fixed costs. Services provided in competitive markets having these characteristics will not all be priced at incremental cost; market forces will determine what the relative contribution of each service will be to cover the fixed and common costs of the various firms that provide various combinations of these services. The resulting rate structure is

unpredictable in advance, so that no one — not even a regulator — will know for certain which prices will rise and which will fall as market forces move them towards the competitive level. Hence, restrictions on the rates at which prices can change — restrictions that do not take market changes into account — can be counter-productive.

51. For example, it may be the case that competitive market prices involve higher, above-cost basic exchange rates and lower usage rates. Below-cost basic exchange rates discourage competition for the low-usage segment of the market, so that a consequence of the Staff's and the AG's regulation of basic exchange prices may be to delay local exchange competition or distort the mix of customers it serves. Similarly, current distortions between urban and rural rates, combined with the proposed restrictions on the speed with which prices can change, may alter the outcome of the competitive process in ways that delay or deny the benefits of competition to particular sets of customers.

52. The Staff recommends that Basic service rate increases be limited to 3 percent per year, presumably for each Basic service. Non-Basic services are classified into three groups distinguishing residential and business services and a group of three popular vertical services: call waiting, call forwarding and caller ID ("protected services"). Thus, Staff's Group I consists of all Non-Basic residential services except the protected services, Group II contains all Non-Basic business services except the protected services, and Group III consists of the protected services. Prices for services in Groups I and II are constrained by two sets of price caps. Average annual group-level price changes for Groups I and II cannot exceed 5 and 10 percent respectively. In addition, individual service price changes within the groups are constrained by different caps, depending on whether the service price exceeds \$3 (presumably per month). Group III service prices are capped at their current level for three years, after which they rejoin Groups I and II.

A. The Staff Plan

53. As a price regulation plan, the Staff Proposal is a peculiar hybrid. On the one hand, it permits basic exchange rates to move in the proper direction by a maximum of 3 percent per year, which represents an improvement over the existing Plan. On the other hand, it arbitrarily chooses to protect the current prices of three popular discretionary services for three years and subjects other Non-Basic service prices to a more stringent

price cap than that thought appropriate in 1995. The economic and policy arguments favoring such a plan are difficult to imagine. First, neither Staff nor anyone else has any reasonable idea what the relative prices of the protected services and other Basic and Non-Basic services would be in competitive markets. Second, vertical services have historically been priced above incremental cost at market-based levels simply because they are optional services for which regulatory protection is not thought to be necessary. Third, the protected services are generally offered (by ILECs and CLECs) only in combination with local service. Thus, the proposed price regulation would affect how ILECs can change the relative prices of services offered to their local exchange customers, but not how CLECs can change those relative prices. Fourth, vertical services are frequently offered in optional packages by ILECs and CLECs, and these proposed restrictions on price changes of individual services (presumably) could not be used to restrict price changes for optional packages. Any attempt to do so would run up against the problem that a bundle is a service unto itself, and changes in its price cannot be rationally divided or allocated among its constituent services.

B. The AG's Plan

54. The AG proposes some odd refinements to the price regulation portion of the Staff's Plan. In its Comments (at 15), the AG calls for an investigation of the "five percent" pricing rule limit. The AG's consultant's report (at 14-15) calls for a cap on "local service" prices for "several" years, followed by a price cap that increases annually by half the rate of inflation.

55. As a preliminary matter, irrespective of the parameters of whether 5 percent is a reasonable pricing limit, the mechanism of applying a formula mechanically to constrain prices irrespective of market conditions makes no sense in current Alabama markets opened to competition. Consider the effect on the business plans and investment strategies of cable companies, wireless companies, or other prospective CLECs caused by an announcement that for the foreseeable future, their major competitor's local service prices will fall in real terms (relative to inflation) regardless of their current relationship with costs and irrespective of changes in those costs or in market conditions. The entry and investment in network facilities that would take place in that environment would be

very different from that which would occur in markets where competitive forces determine market prices.

1. The TFP Study

56. The bulk of the Dr. Kahn's report describes a purported productivity study that supposedly supports these price caps as necessary to flow through productivity gains to consumers in the form of price increases less than the rate of inflation. That study does not measure total factor productivity ("TFP") as it is conventionally defined in economics and cannot be used as a reliable basis for forecasting the future rate of BellSouth productivity growth or the appropriate relationship between BellSouth's prices and national inflation. A TFP study, by definition, measures the difference between the growth rates of output quantities and input quantities. In summary, Dr. Kahn's study is unconventional and incorrect for both measurements.

- The prospective <u>output</u> growth rate estimated by Dr. Kahn overstates the historical and likely future output growth rate for BellSouth in Alabama.
  - Recent growth rates of physical measures of output for BellSouth are negative, not positive. An annual growth rate of 2.56 percent is an unrealistic target under current market conditions.
  - Dr. Kahn's adjustment to ARMIS revenues to account for price changes does not represent a valid quantity index of output, and revenue adjustments do not coincide with BellSouth's ARMIS 43-02 Reports for 1996-2002.
  - Revenue growth has been driven substantially by new data services, whose prices would not be subject to the AG's price cap plan.
- The prospective <u>input</u> quantity growth rate estimate by Dr. Kahn understates the historical and likely future input quantity growth rate for BellSouth in Alabama.
  - Inputs (and TFP) cannot be meaningfully calculated for the intrastate portion of BellSouth's services because a large portion of costs are fixed and common across the interstate and intrastate jurisdictions.
  - Dr. Kahn's measure of capital services bears no relationship with either of the standard methods of measuring capital inputs for TFP studies.
  - Deflating operating expenses by GDP-PI does not produce a reasonable index of physical input quantities. BellSouth's input prices grow roughly at the same rate as U.S. <u>input</u> prices, not GDP-PI (which measures U.S. <u>output</u> price growth).

In more detail, Dr. Kahn's study contains methodological and data errors for both output and input growth rates.

a) Output Quantity Growth Rates

57. In the current market environment, is it reasonable to expect that BellSouth will be able to continue to achieve its historical rate of productivity growth and that market forces are unable to reflect that productivity growth appropriately in prices? Productivity growth in telecommunications depends critically on output growth, for two main reasons.

- Because telecommunications firms have a high proportion of fixed costs, unit costs decline with output. Moreover, higher output growth rates imply higher utilization of switches and transport facilities. Thus, scale economies are an important direct source of productivity growth.
- The second important source of productivity growth is technology, and new technology diffuses more rapidly throughout the telecom network when output is growing rapidly. For example, switches are upgraded and replaced when usage reaches capacity, so that higher output growth increases the rate at which new and more productive switching technology is introduced into the network.

Conversely, of course, when demand growth slows, so also does growth in productivity. Figure 1 shows what has happened to the demand for the major categories of local exchange service over the period of the AG's productivity study. The historical rates of growth of lines and minutes that led to historical telecom productivity growth rates that exceeded the national average came to a halt in the sector meltdown in 2000, and for the first time in history, BellSouth's line and usage volumes have significantly declined rather than grown. No target for future productivity growth should assume output growth rates at their historical level over the 1996-2002 period.

58. The TFP calculation itself in the AG's consultant's report is simply a back-of-the-envelope calculation that does not follow any of the standard procedures in the industry for calculating growth rates for telecom outputs or inputs. First, on the output side, Dr. Kahn, purports to take ARMIS revenues for BellSouth's regulated telecom services in Alabama and remove the 1996 and 2002 ARMIS values to account for significant revenue changes stemming from price changes. The result he uses as if it measured the growth in physical output (*e.g.*, lines, calls, and minutes). Standard procedures used over the years in industry and FCC productivity studies measure output growth in one of two ways: (i) adjusting revenue growth by an output price index, or (ii) calculating a revenue-

weighted average of the growth rates of the various physical measures of output. Dr. Kahn's calculation takes neither of these approaches.[25]

59. Second, Figure 1 shows that Dr. Kahn's calculation is not a reasonable approximation to either of these methods. According to Dr. Kahn, BellSouth's physical output in Alabama grew at an annual rate of 2.56 percent between 1996 and 2002. That would come as a surprise to BellSouth. For the 1996-2002 period, the annual growth rates of the outputs graphed in Figure 1 are 0.1, -2.4, -0.01, and 0.53 percent for access lines, local calls, toll calls, and carrier access minutes respectively. It is difficult to understand how some revenue weighted average of these growth rates can average +2.56 percent, even taking into account the fact that some outputs (*e.g.*, vertical services) are not accounted for. And of course, the average output growth rates would be even lower if measured in the more recent years since the meltdown in 2000. The average annual revenue growth rate of +2.56% as calculated by Dr. Kahn is primarily the result of the growth in data and vertical services revenue and, therefore, is not representative of the growth in physical outputs related to basic local service (i.e., 1FR and 1FB).

b) Input Quantity Growth Rates

60. The input side of the calculation is equally problematic. First, Dr. Kahn purports to measure TFP growth for BellSouth's Alabama operations, but those operations do not possess well-defined productivity growth. A large portion of inputs into the production of telephone services are fixed costs that are shared across states in BellSouth's territory, and although those costs are allocated for regulatory purposes into the various state jurisdictions, those allocations have no economic meaning. In theory, BellSouth's total factor productivity growth for Alabama is well-defined only if the production process for telecommunications services is *separable* across states, and the important role of fixed costs implies that production is not at all separable.

61. Second, Dr. Kahn's use of national inflation to deflate operating expenses to obtain a measure of the growth of labor and raw materials is improper. Productivity studies

[25] Without work papers, it is impossible to verify Dr. Kahn's calculations. Dr. Kahn's numbers for adjustments to revenue cannot be reconciled with BellSouth's ARMIS data for Alabama as reported in Table C-5 of Report 43-02.

performed by the FCC staff using publicly available data treat the various categories of labor and materials separately and use price deflators specific to those categories rather than simply using U.S. inflation rates as a deflator.

62. Third, Dr. Kahn's measure of capital services has no foundation in economics, There is no reason to believe that accounting measures of interest, return, and taxes represent the appropriate economic cost shareholders incur in any year and even less reason to believe that that measure of capital cost should be a constant fraction of net investment.

63. Fourth, deflating operating expenses plus this measure of capital costs by national inflation (GDP-PI) would not produce an accurate estimate of input quantity growth rates, even if the cost measures were accurate, The reason is that GDP-PI systematically differs from any reasonable index of telecommunications input prices. Dr. Kahn is confused (at 21) where he claims that BellSouth has argued in productivity filings that GDP-PI approximates its input price changes. What the ILEC industry has argued — correctly, in my view — is that national input price growth reasonably approximates the growth rates of BellSouth's inputs. The growth in GDP-PI, however, is not a reasonable approximation to national input price growth rates. Of course not. GDP-PI measures the change in national output prices, not input prices, and, in theory, output price growth differs from input price growth by the change in national TFP growth.

c) Data Inconsistencies

64. Fifth, without work papers, it is difficult to reconcile Dr. Kahn's numbers with BellSouth's ARMIS reports. In particular,

- Table 4: Depreciation Accruals for 1996-1999 appear inconsistent with BellSouth's filed ARMIS reports, as do Plant Additions for 1996.
- Table 5: Net Investment is understated for each year because it appears that the accumulated amortization on leasehold improvements and capital leases were removed twice. Property Income % appears to improperly include taxes.
- Table 6: Revenue Changes From Price Changes are inconsistent with the ARMIS 43-02 for reports 1996 through 2002.

d) Conclusions

65. In sum, Dr. Kahn's method is not the method used by economists in the industry and regulatory agencies to measure productivity growth. It is also not a good proxy for that method, since it produces a measure of output price growth that is wildly at variance with the facts. Moreover, even if BellSouth's Alabama TFP growth were well-defined and Dr. Kahn were able to measure it, it would still be improper to use that measurement to justify a productivity offset in a price cap plan. There is widespread agreement among the parties that have litigated productivity growth for price cap plans over the years that it is industry productivity growth that should be used to set a target for productivity growth in the future, not the productivity growth of the individual regulated firm. The reasons are simple: (i) prices in competitive markets are driven by reductions in industry unit costs, not the unit costs of any individual firm, and (ii) the use of the firm's historical productivity growth to set a target for future productivity growth obviously distorts the firm's incentives to increase productivity growth in the first place.

66. Finally, the important problem with the price cap plan envisioned by the AG is not that its productivity targets are unreasonable — although, based on current telecom markets, they are unreasonable. Rather, the price cap plan would perpetuate the use of a blunt regulatory instrument that was designed as a transition mechanism to protect consumers as markets became more competitive. Application of that instrument today to BellSouth would handicap it relative to its unregulated competitors and, equally important, would cause competitors to rethink their business cases regarding entry and investment.

67. One additional problem with the structure of the AG's plan is the assertion that allowing the firm to pass through the financial effects of federal or state government mandates "is inappropriate in a price cap regulatory agreement" (at 8) is incorrect. Nearly all telecommunications price cap plans permit so-called exogenous adjustments, so that (i) changes in the price cap can more accurately track changes in costs, and (ii) regulators and legislators cannot change financial conditions in the industry (through taxes or price and service quality changes) without affecting customers. So long as the changes in question are beyond the control of the regulated firm, passing through such

cost increases or decreases in the form of price increases or decreases should not diminish the incentives of the regulated firm to minimize costs and expand output.

VII. Carrier Access Charges

68. Intoxicated with TELRIC-based prices for interconnection and UNEs, the IXCs enthusiastically urge similar treatment for carrier access services. Nothing in economic theory or practice, however, suggests that multiproduct firms in competitive markets should price services at forward-looking incremental cost or even at forward-looking incremental cost marked up by some arbitrary allocation of shared fixed and common costs. Firms in competitive markets recover shared fixed and common costs where market conditions — not accounting conventions — permit. A market-based approach reveals the economic price of access, not as the sum of a TELRIC study and an allocation of fixed costs, but as the level to which competitive pressure forces access prices. As the FCC recognized when it rejected the proposition that interstate carrier access charges be set at TELRIC, "competition will do a better job of determining the true economic cost of providing such services."[26] The Commission would do well to be guided by the FCC's analysis rather than that of the other parties in this case.

69. The key point is that regulated services should be priced taking into account market conditions. In service markets where market and firm demand permit the recovery of substantial amounts of shared fixed and common costs, such as the telecommunications industry, prices are marked up above incremental cost more than in markets where conditions force prices close to incremental costs. At divestiture, the burden to recover the lost contribution from interLATA toll services was placed on switched access service — a service for which customers then had few substitutes and which therefore offered a comparatively efficient means to recover the lost contribution.[27]

[26] *See*, Before the Federal Communications Commissions, *In the Matter of Access Charge Reform* (CC Docket No. 96-262), First Report and Order, Release No. FCC 97-158, May 7, 1997, at ¶265.

[27] Though carrier access is a relatively efficient source from which to recover lost contribution, it is not absolutely efficient. The initial levels of interstate and intrastate carrier access charges were sufficiently high to engender facilities-based competition from competitive access providers such as MFS and Teleport—now part of WorldCom and AT&T. Since 1984, carrier access charges have fallen dramatically to reflect facilities-based competition for exchange access, particularly to high-volume customers.

70. Switched access charges still can and should provide some support to the shared fixed and common costs of the network by being priced above incremental cost. The 1996 Act and subsequent FCC local competition order set the price of access to the local network (using UNEs) equal to TELRIC.[28] These rules do not apply to switched access charges. In unregulated competitive markets, market forces do not push the market price down to equal the incremental cost of each service. Firms in unregulated competitive markets must price to recover all of their forward-looking costs or they will be forced to exit the market. In the presence of significant shared fixed and common costs, prices in competitive markets necessarily exceed the incremental cost of each service.

71. For example, in the U.S. long distance market, which is generally thought to be workably competitive now, the average revenue per minute for toll service was about 8 cents in 2001.[29] Marginal network costs might have averaged about 1-2 cents per minute[30] and carrier access charges about 1.34 cents per minute,[31] so that the markup of price over incremental cost was about 140 percent in that market.[32] Thus, the assertion that price in a competitive market is fairly close to incremental cost does not hold true in telecommunications markets. In this example, the absolute markup of price over marginal cost for retail residence long distance service far exceeds the entire magnitude of carrier access charges, let alone the markup of carrier access charges over TELRIC.

72. Can IXCs compete with BellSouth on a fair basis even when access charges are set above cost? Yes, as demonstrated by the steady growth in competition, particularly by AT&T and MCI. The tired argument that, absent reducing carrier access prices to

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[28] *See*, Before the Federal Communications Commission, *In the Matter of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket 96-96, First Report and Order, released August 8, 1996.
[29] *See*, FCC, *Reference Book of Rates, Price Indices and Household Expenditures for Telephone Services*, July 2003, Table 1.23.
[30] Sources of the 1-2 cent per minute figure are Lewis J. Perl and Jonathan Falk, *The Use of Econometric Analysis in Estimating Marginal Cost*, Presented at Bellcore and Bell Canada Industry Forum, San Diego, California, April 6, 1989, Table 2; Paul W. MacAvoy, *The Failure of Antitrust and Regulation to Establish Competition in Long-Distance Telephone Services*, MIT and AEI Presses, 1996, at 115, citing an estimate by Wharton Econometric Forecasting Associates; and Lehman Brothers, *Telecom Services: Buy the Bundle Builders, Get the Growth*, March 18, 1996: "Large customers and large resellers can purchase transport at close to long-run incremental costs, or at about the $0.02 per minute in average depreciation and network engineering costs of the major players (this is the rate that the federal government recently negotiated on its multiyear FTS 2000 contract for POP-to-POP transport)." (at 28).
[31] *See*, FCC, Industry Analysis Division, *CALLS Analysis*, May 25, 2000, Graph 8.
[32] $[0.08 - 0.0334] / 0.0334 = 1.39$.

incremental cost IXCs cannot compete, has no basis in economics and has not improved with frequent repetition.

73. There is common agreement that current carrier access rates — like many other telecommunications prices — are set above the forward-looking incremental cost of supplying the service. The difference between price and cost for carrier access services contributes to the recovery of shared fixed and common costs of the firm, as well as to services such as residential basic exchange service that are intentionally priced by the Commission at prices below their efficient level to achieve social goals. This fact does not imply that such prices harm competition in the long distance market, and there is substantial historical evidence that such practices have not harmed competition.

74. A simple example should make this point clearly. Suppose (hypothetically) that the market price for toll service is 6 cents per minute and BellSouth charges 3 cents per minute for carrier access. Suppose also the cost of providing carrier access is 1 cent per minute and the additional cost (above access costs) for providing toll service are 2 cents per minute. The IXCs complain that in this case, BellSouth would receive a margin of 3 cents per minute for its toll service (6 – 2 – 1), while AT&T would receive a margin of 1 cent (6 – 2 – 3), stemming from the "fact" that carrier access appears to cost BellSouth 1 cent per minute but costs AT&T 3 cents per minute.

75. As a matter of accounting, however, that 2 cent difference in margin is entirely due to the 2 cent margin in carrier access service that BellSouth receives at the (regulated) carrier access price. And this carrier access margin has no effect on competition in long distance. The reason is simple. For every customer BellSouth takes away from AT&T, it loses 2 cents per minute in carrier access contribution. Thus, if BellSouth priced below 5 cents per minute, it would lose money on every minute it took from AT&T. At 5 cents per minute, BellSouth would receive 2 cents of contribution for every minute of toll service and would be financially indifferent between that and providing carrier access service that contributes the same 2 cents per minute. For long distance investment and marketing, BellSouth would behave as if its contribution had reached 0 at a long distance price of 5 cents per minute., precisely the same point at which AT&T's long distance contribution would reach 0.

VIII. Plan Comparison

76. As I understand it, the BellSouth Metro Pricing Flexibility Plan differs from the Staff Plan in several important ways. First, the BellSouth Plan recognizes differences in market conditions among Tier I and Tier II MSAs and Non-MSA areas and adjusts the stringency of the proposed price regulation accordingly. In dense metropolitan areas where local exchange competition is currently vigorous, the BellSouth plan removes regulation of price changes, subject only to posting the results in a price list. In less dense areas, BellSouth's plan calls for an overall cap on price changes of 5 percent per year. In comparison, the Staff Plan restricts basic exchange price increases to 3 percent per year in all geographic markets in Alabama and places different constraints on price increases for various Non-Basic services, again without reference to geographic variation in the degree of local exchange competition.

77. In my view, the BellSouth Metro plan represents an improvement on the 1995 Plan and on Staff's proposed plan in this dimension. The growth of competition and removal of barriers to entry means that protecting consumers from the exercise of market power is less relevant and the adverse consequences of asymmetric control of pricing decisions are more relevant. The Staff plan imposes greater restrictions than the BellSouth plan, and it attempts to micromanage the directions in which relative prices of Basic and certain protected Non-Basic services can move. Staff's price regulations do not recognize the fact that competition is more highly developed in the large MSAs in Alabama and instead try to impose a single set of price caps onto services supplied under very different market conditions. The BellSouth plan, in contrast, does not regulate price changes at all where price competition is robust, and where it does limit price increases, it does so by means of a cap on aggregate service price changes, leaving the movement of <u>relative</u> prices to be determined by market forces.

78. BellSouth's use of MSAs as workable approximations to the geographic markets in which local exchange services are sold is reasonable. CLECs do not enter local exchange markets by offering services in single wire centers, and the fact that mass-media advertising contours roughly approximate the boundaries of MSAs means that firms effectively hold themselves out to offer services throughout an MSA. The FCC has used MSAs as geographic markets on a number of occasions, and it is a far better

approximation to the economic geographic markets in Alabama than the statewide market that the Staff Report implicitly assumes.[33]

79. A second difference between the Staff plan and that proposed by BellSouth is the level of price floors, as discussed above. From an economic perspective, BellSouth's proposed LRIC price floor is correct and certainly better than the TSLRIC/TELRIC floor advocated by Staff. The only correction I would make to the BellSouth proposal would be to add the requirement that while individual components of a service must be priced at or above LRIC, no service in aggregate can be priced below its TSLRIC, subject to Commission exemption. Such a requirement ensures that no service is the recipient of a cross-subsidy.

80. The final major differences in the Plans involve shorter notice and filing requirements in the BellSouth plan. These changes have the effect of reducing the asymmetry in the ability of incumbents and entrants to market quickly and aggressively to satisfy changing consumer demands. Such additional symmetry makes the competitive process more responsive to consumer needs and wants.

81. On the whole, the BellSouth Metro Pricing Flexibility Plan represents a reasonable transition from the 1995 Price Regulation Plan towards an ultimate reliance on market forces to protect customers and competitors and bring the benefits of vigorous competition to Alabama consumers. It provides a tailored approach to price regulation, permitting greater flexibility where competition is more developed. It also places no constraints on the relative price changes of different services, which permits market forces to determine the directions in which relative prices for different services will move.

[33] See, for example, *In the Matter of Telephone Number Portability and CTIA Petitions for Declaratory Ruling on Wireline-Wireless Porting Issues,* Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, (CC Docket No. 95-116) (FCC 03-284) (rel. November 10, 2003) at ¶ 29-30. *Applications of NYNEX Corporation Transferor, and Bell Atlantic Corporation Transferee, For Consent to Transfer Control of NYNEX Corporation and Its Subsidiaries,* File No. NSD-L-96-10, *Memorandum Opinion and Order, 12 FCC Rcd 199985 (1997)* at ¶ 55-56. *In the Matter of Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Interexchange Carrier Purchases of Switched Access Services Offered by Competitive Local Exchange Carriers, Petition of U S West Communications, Inc. for Forbearance from Regulation as a dominant Carrier in the Phoenix, Arizona MSA*, CC Docket Nos. 96-262, 94-1, CCB/CPD File No. 98-63 and CC Docket No. 98-157. Fifth Report and Order and Further Notice of Proposed Rulemaking, Released August 27, 1999 at ¶ 72.

IX. Conclusions

82. Price regulation was designed to be a transition mechanism from tight regulatory control of prices based on costs to a regime in which market forces control prices and service offerings. The Alabama Public Service Commission started down this road in 1995. Obviously, circumstances have changed radically since then. The level and degree of local competition that BellSouth faces in Alabama warrant several important changes in price regulation going forward. First, the application of a price cap adjustment formula no longer makes sense in Alabama markets. These markets are unarguably opened to competition, and continued reductions (relative to inflation) in market prices for basic local exchange services irrespective of market conditions will fundamentally distort the outcome of the competitive process. Second, to the extent possible, BellSouth should have pricing flexibility on par with that of its competitors. In its Metro areas, price regulation is unnecessary for any telephone company; in more rural areas, controls on price changes that leave room for flexibility will distort competition the least. Third, continued regulation must be as symmetric and competitively-neutral as possible, so that customer preferences rather than regulatory classifications determine who the successful telecommunications providers will be.

83. In this setting, the Staff's Plan neither provides price control with flexibility nor competitively-neutral regulation. Staff's proposed pricing rules would strictly control the relative retail prices of various BellSouth local exchange services as well as limiting BellSouth's (and only BellSouth's) upward pricing flexibility for local services. Its proposed price floor is also too restrictive, which would have the undesirable effect of erecting a price umbrella under which inefficient entrants can compete and denying Alabama customers the lower prices that competition was intended to bring them.

84. The CLEC's proposals generally entail asymmetric restrictions on BellSouth's ability to lower prices, offer new services or new bundles of services, match competitors' offerings, and respond to customer service requests. The AG would also restrict BellSouth's promotions and competitive offerings by requiring that BellSouth (and no other competitor) supply such offerings everywhere in the state or nowhere. The difficulty with such restrictions on a large supplier of local service is that it will chill the competitive process throughout Alabama. BellSouth cannot undertake promotions or

discount packages of services unless those actions are profitable. Restricting BellSouth's marketing would thus deny an important and visible source of competition to Alabama customers.

85. The AG's proposal includes a continuation of an "inflation minus X" price cap plan for basic services in which the value of X is justified by a measure of BellSouth's historical TFP growth in Alabama. The study does not measure TFP growth, and historical values of output and input growth cannot be relied upon to set a reasonable target for an achievable productivity growth for telecommunications firms in the future.

86. Finally, AT&T and MCI inject the unrelated issue of carrier access charge reductions into this discussion of price regulation plans. Their assertions are incorrect, as well as irrelevant. They are not placed at any competitive disadvantage by BellSouth carrier access charges set above cost, as shown in economic theory and in fact.

87. In my opinion, BellSouth's Metro Pricing Flexibility Plan, modified as I suggest above, represents a reasonable next step in the evolution of price regulation as markets are opened to competition. It provides adequate control of prices to protect consumers and competitors where there is insufficient competition for market forces to do the job, and it treats incumbents and entrants symmetrically for the non-price regulations that remain.

ATTACHMENT WET-1

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Dr. Taylor received a B.A. *magna cum laude* in Economics from Harvard College, an M.A. in Statistics and a Ph.D. in Economics from the University of California at Berkeley. He has taught economics, statistics, and econometrics at Cornell and the Massachusetts Institute of Technology and was a post doctoral Research Fellow at the Center for Operations Research and Econometrics at the University of Louvain, Belgium.

At NERA, Dr. Taylor is a Senior Vice President, heads the Cambridge office and is Director of the Telecommunications Practice. He has worked primarily in the field of telecommunications economics on problems of state and federal regulatory reform, competition policy, terms and conditions for competitive parity in local competition, quantitative analysis of state and federal price cap and incentive regulation proposals, and antitrust problems in telecommunications markets. He has testified on telecommunications economics before numerous state regulatory authorities, the Federal Communications Commission, the Canadian Radio-Television and Telecommunications Commission, federal and state congressional committees and courts. Recently, he was chosen by the Mexican Federal Telecommunications Commission and Telmex to arbitrate the renewal of the Telmex price cap plan in Mexico. Other recent work includes studies of the competitive effects of major mergers among telecommunications firms and analyses of vertical integration and interconnection of telecommunications networks. He has appeared as a telecommunications commentator on PBS Radio and on The News Hour with Jim Lehrer.

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EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY
Ph.D., Economics, 1974

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EMPLOYMENT

NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC. (NERA)
1988- Senior Vice President, Office Head, Telecommunications Practice Director.

BELL COMMUNICATIONS RESEARCH, INC. (Bellcore)
1983-1988 Division Manager, Economic Analysis, formerly Central Services Organization, formerly American Telephone and Telegraph Company: theoretical and quantitative work on problems raised by the Bell System divestiture and the implementation of access charges, including design and implementation of demand response forecasting for interstate access demand, quantification of potential bypass liability, design of optimal nonlinear price schedules for access charges and theoretical and quantitative analysis of price cap regulation of access charges.

BELL TELEPHONE LABORATORIES
1975-1983 Member, Technical Staff, Economics Research Center: basic research on theoretical and applied econometrics, focusing on small sample theory, panel data and simultaneous equations systems.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Fall 1977 Visiting Associate Professor, Department of Economics: taught graduate courses in econometrics.

CENTER FOR OPERATIONS RESEARCH AND ECONOMETRICS
Université Catholique de Louvain, Belgium.
1974-1975 Post Doctoral Research Associate: basic research on finite sample econometric theory and on cost function estimation.

CORNELL UNIVERSITY

1972-1975 Assistant Professor, Department of Economics. (On leave 1974-1975.) taught graduate and undergraduate courses on econometrics, microeconomic theory and economic principles.

MISCELLANEOUS

1985-1995 Associate Editor, *Journal of Econometrics*, North-Holland Publishing Company.
1990- Board of Directors, National Economic Research Associates, Inc.
1995- Board of Trustees, Treasurer, Episcopal Divinity School, Cambridge, Massachusetts.

PUBLICATIONS

"Smoothness Priors and Stochastic Prior Restrictions in Distributed Lag Estimation," *International Economic Review*, 15 (1974), pp. 803-804.

"Prior Information on the Coefficients When the Disturbance Covariance Matrix is Unknown," *Econometrica*, 44 (1976), pp. 725-739.

"Small Sample Properties of a Class of Two Stage Aitken Estimators," *Econometrica*, 45 (1977), pp. 497-508.

"The Heteroscedastic Linear Model: Exact Finite Sample Results," *Econometrica*, 46 (1978), pp. 663-676.

"Small Sample Considerations in Estimation from Panel Data," *Journal of Econometrics*, 13 (1980) pp. 203-223.

"Comparing Specification Tests and Classical Tests," Bell Laboratories Economics Discussion Paper, 1980 (with J.A. Hausman).

"Panel Data and Unobservable Individual Effects," *Econometrica*, 49 (1981), pp. 1377-1398 (with J.A. Hausman).

"On the Efficiency of the Cochrane-Orcutt Estimator," *Journal of Econometrics*, 17 (1981), pp. 67-82.

"A Generalized Specification Test," *Economics Letters*, 8 (1981), pp. 239-245 (with J.A. Hausman).

"Identification in Linear Simultaneous Equations Models with Covariance Restrictions: An Instrumental Variables Interpretation," *Econometrica*, 51 (1983), pp. 1527-1549 (with J.A. Hausman).

"On the Relevance of Finite Sample Distribution Theory," *Econometric Reviews*, 2 (1983), pp. 1-84.

"Universal Service and the Access Charge Debate: Comment," in P.C. Mann and H.M. Trebing (editors), *Changing Patterns in Regulation, Markets, and Technology: The Effect on Public Utility Pricing*. The Institute of Public Utilities, Michigan State University, 1984.

"Recovery of Local Telephone Plant Costs under the St. Louis Plan," in P.C. Mann and H.M. Trebing (editors), *Impact of Deregulation and Market Forces on Public Utilities*. The Institute of Public Utilities, Michigan State University, 1985.

"Access Charges and Bypass: Some Approximate Magnitudes," in W.R. Cooke (editor), *Proceedings of the Twelfth Annual Telecommunications Policy Research Conference*, 1985.

"Federal and State Issues in Non-Traffic Sensitive Cost Recovery," in *Proceedings from the Telecommunications Deregulation Forum*. Karl Eller Center, College of Business and Public Administration, University of Arizona, Tucson, Arizona, 1986.

"Panel Data" in N.L. Johnson and S. Kotz (editors), *Encyclopedia of Statistical Sciences*. John Wiley & Sons, New York, 1986.

"An Analysis of Tapered Access Charges for End Users," in P.C. Mann and H.M. Trebing (editors), *New Regulatory and Management Strategies in a Changing Market Environment*. The Institute of Public Utilities, Michigan State University, 1987 (with D.P. Heyman, J.M. Lazorchak, and D.S. Sibley).

"Efficient Estimation and Identification of Simultaneous Equation Models with Covariance Restrictions," *Econometrica*, 55 (1987), pp. 849-874 (with J.A. Hausman and W.K. Newey).

"Alternative NTS Recovery Mechanisms and Geographic Averaging of Toll Rates," in *Proceedings of the Thirteenth Annual Rate Symposium: Pricing Electric, Gas, and Telecommunications Services*. The Institute for the Study of Regulation, University of Missouri, Columbia, 1987.

"Price Cap Regulation: Contrasting Approaches Taken at the Federal and State Level," in W. Bolter (editor), *Federal/State Price-of-Service Regulation: Why, What and How?*, Proceedings of the George Washington University Policy Symposium, December, 1987.

"Local Exchange Pricing: Is There Any Hope?", in J. Alleman (editor), *Perspectives on the Telephone Industry: The Challenge of the Future*. Ballinger Publishing Company, Cambridge, Massachusetts, 1989.

"Generic Costing and Pricing Problems in the New Network: How Should Costs be Defined and Assessed," in P.C. Mann and H.M. Trebing (editors) *New Regulatory Concepts, Issues, and Controversies*. The Institute of Public Utilities, Michigan State University, 1989.

"Telephone Penetration and Universal Service in the 1980s," in B. Cole (editor), *Divestiture Five Years Later*. Columbia University Press, New York, New York, 1989 (with L.J. Perl).

"Regulating Competition for IntraLATA Services," in *Telecommunications in a Competitive Environment*, Proceedings of the Third Biennial NERA Telecommunications Conference, 1989, pp. 35-50.

"Costing Principles for Competitive Assessment," in *Telecommunications Costing in a Dynamic Environment*, Bellcore-Bell Canada Conference Proceedings, 1989 (with T.J. Tardiff).

"Optional Tariffs for Access in the FCC's Price Cap Proposal," in M. Einhorn (ed.), *Price Caps and Incentive Regulation in the Telecommunications Industry*. Kluwer, 1991 (with D.P. Heyman and D.S. Sibley).

"Alternative Measures of Cross-Subsidization," prepared for the Florida Workshop on Appropriate Methodologies for the Detection of Cross--Subsidies, June 8, 1991.

"Predation and Multiproduct Firms: An Economic Appraisal of the Sievers-Albery Results," *Antitrust Law Journal*, 30 (1992), pp. 785-795.

"Lessons for the Energy Industries from Deregulation in Telecommunications," *Proceedings of the 46th Annual Meeting of the Federal Energy Bar Association*, May 1992.

"Efficient Price of Telecommunications Services: The State of the Debate," *Review of Industrial Organization*, Vol. 8, pp. 21-37, 1993.

"Status and Results of Regulatory Reform in the U.S. Telecommunications Industry," in C.G. Stalon, *Regulatory Responses to Continuously Changing Industry Structures*. The Institute of Public Utilities, Michigan State University, 1992.

"Post-Divestiture Long-Distance Competition in the United States," *American Economic Review*, Vol. 83, No. 2, May 1993 (with Lester D. Taylor). Reprinted in E. Bailey, J. Hower, and J. Pack, *The Political Economy of Privatization and Deregulation*. London: Edward Elgar, 1994.

"Comment on 'Pricing of Inputs Sold to Competitors,' by W.J. Baumol and J.G. Sidak," *Yale Journal on Regulation*, Vol. 11, Issue 1, 1994, pp. 225-240 (with Alfred E. Kahn).

"Comments on Economic Efficiency and Incentive Regulation," Chapter 7 in S. Globerman, W. Stanbury and T. Wilson, *The Future of Telecommunications Policy in Canada*. Toronto: Institute for Policy Analysis, University of Toronto, April 1995.

"Revising Price Caps: The Next Generation of Incentive Regulation Plans," Chapter 2 in M.A. Crew (ed.) *Pricing and Regulatory Innovations under Increasing Competition*. Boston: Kluwer Academic Publishers, May 1996 (with T. Tardiff).

"An Analysis of the State of Competition in Long-Distance Telephone Markets," *Journal of Regulatory Economics*, May 1997, pp. 227-256 (with J.D. Zona).

"An Analysis of the Welfare Effects of Long Distance Market Entry by an Integrated Access and Long Distance Provider," *Journal of Regulatory Economics*, March 1998, pp. 183-196 (with Richard Schmalensee, J.D. Zona and Paul Hinton).

"Market Power and Mergers in Telecommunications," *Proceedings of the Institute of Public Utilities, 30th Annual Conference: Competition in Crisis: Where are Network Industries Heading?* The Institute of Public Utilities, Michigan State University, 1999.

"The Baby and the Bathwater: Utility Competition, But at What Price?," Public Utilities Fortnightly, Vol. 137, No.21, November 15, 1999, pp. 48-56 (with Anne S. Babineau and Matthew M. Weissman).

TESTIMONIES

Access Charges

Florida Public Service Commission (Docket No. 820537-TP), July 22, 1983.

Arkansas Public Service Commission (Docket No. 83-042-U), October 7, 1985.

Public Utility Commission of Texas (Docket No. 8585), December 18, 1989.

Mexican Secretariat of Communications and Transport, affidavit filed October 18, 1995 (with T. Tardiff).

Federal Communications Commission (CC Docket No. 96-98), affidavit July 8, 1996; *ex parte* letters filed July 22, 1996 and July 23, 1996.

Federal Communications Commission (CC Docket No. 96-262 et. al.) with Richard Schmalensee, January 29, 1997). Rebuttal February 14, 1997.

New York Public Service Commission (Case 94-C-0095 and 28425), Panel Testimony, May 8, 1997. Rebuttal Panel Testimony July 8, 1997.

Pennsylvania Public Utility Commission (Docket No. I-00960066), June 30, 1997. Rebuttal July 29, 1997. Surrebuttal August 27, 1997.

Connecticut Department of Public Utility Control (Docket No. 96-04-07), October 16, 1997.

Federal Communications Commission (*ex parte* CC Docket No. 96-262 *et. al.*), with Richard Schmalensee, January 21, 1998.
Federal Communications Commission (CCB/CPD 98-12), March 18, 1998.
Federal Communications Commission (CC Docket Nos. 96-262, 94-1, 97-250 and RM 9210), October 26, 1998. Reply November 9, 1998.
Federal Communications Commission (Docket No. 99-24), with Karl McDermott, January 20, 1999. Reply April 8, 1999.
Vermont Public Service Board (Docket No. 6167), May 20, 1999. Supplemental May 27, 1999.
Virginia State Corporation Commission, (Case No. PUC 000003), May 30, 2000.
Maryland Public Service Commission (Case No. 8745), March 23, 2001. Rebuttal May 21, 2001. Surrebuttal June 11, 2001.
Federal Communications Commission (RM No. 10593) (with A.E. Kahn), Declaration filed December 2, 2002.

Antitrust and Damages

Expert testimony: *FreBon International Corp. vs. BA Corp. Civil Action*, No. 94-324 (GK), regarding Defendants' Amended Expert Disclosure Statement, filed under seal February 15; 1996.
CPR Institute for Dispute Resolution Arbitral Tribunal, Rebuttal Affidavit in arbitrations between BellSouth Telecommunications and Supra Telecommunications & Information Systems, November 5, 2001.
U.S. District Court, Southern District of Florida (Case No. 99-1706). Confidential Reply Report filed April 25, 2003.
U.S. District Court, Eastern District of Louisiana (Civil Action No. 02-0481) on behalf of Lucent Technologies, Inc. Expert Report filed June 16, 2003.
American Arbitration Association (Case No: 50-T-180-00458-02) on behalf of Softbank Corp. Direct and Supplemental direct testimonies filed July 2003.

Incentive and Price Cap Regulation

Federal Communications Commission (Docket No. 87-313), March 17, 1988.
Florida Public Service Commission (Docket No. 880069-TL), June 10, 1988.
Federal Communications Commission (Docket No. 87-313), August 18, 1988. Rebuttal November 18, 1988.
New Hampshire Public Service Commission (Docket 89-010), March 3, 1989.
Federal Communications Commission (Docket No. 87-313), June 9, 1989.
Federal Communications Commission (Docket No. 87-313), August 3, 1989. (2 filings)
New York State Public Service Commission (Case 28961 - Fifth Stage), September 15, 1989.
Georgia Public Service Commission (Docket No. 3882-U), September 29, 1989.
Federal Communications Commission (Docket 87-313), May 3, 1990.
Federal Communications Commission (Docket 87-313), June 8, 1990 (2 filings).
State of Maine Public Utilities Commission (Docket No. 89-397), June 15, 1990.

Montana Public Service Commission (Docket No. 90.8.46), October 4, 1990.
Federal Communications Commission (Docket 87-313), December 21, 1990.
Tennessee Public Service Commission, February 20, 1991.
Federal Communications Commission (Docket 87-313) with Alfred E. Kahn), June 12, 1991.
California Public Utilities Commission (Phase II of Case 90-07-037) with Timothy J. Tardiff, August 30, 1991. Supplemental testimony January 21, 1992.
Rhode Island Public Utilities Commission (Docket No. 1997), September 30, 1991.
Montana Public Service Commission (Docket No. 90.12.86), November 4, 1991. Additional testimony January 15, 1992.
Federal Communications Commission (Pacific Bell Tariff F.C.C. No. 128, Transmittal No. 1579) with T.J. Tardiff, April 15, 1992. Reply comments July 31, 1992.
California Public Utilities Commission (Docket No. I.87-11-033), with T.J. Tardiff, May 1, 1992.
Delaware Public Utilities Commission (Docket No. 33), June 22, 1992.
Florida Public Service Commission (Docket No. 920260-TL), December 18, 1992.
California Public Utilities Commission (Docket No. I.87-11-033), with T.J. Tardiff, April 8, 1993, reply testimony May 7, 1993.
Canadian Radio-Television and Telecommunications Commission (Docket No. 92-78), with T.J. Tardiff, April 13, 1993 (2 filings).
Federal Communications Commission (Petition for Declaratory Ruling and Related Waivers to Establish a New Regulatory Model for the Ameritech Region), April 16, 1993. Reply Comments, July 12, 1993.
Delaware Public Utilities Commission (Docket No. 33), June 1, 1993. Supplementary statement, June 7, 1993. Second supplementary statement," June 14, 1993.
Vermont Public Service Board (Dockets 5700/5702), September 30, 1993. Rebuttal testimony July 5, 1994.
Pennsylvania Public Utility Commission (Docket No. P-009350715), October 1, 1993. Rebuttal January 18, 1994.
Massachusetts Department of Public Utilities (Docket No. D.P.U. 94-50), April 14, 1994. Rebuttal October 26, 1994.
Federal Communications Commission (CC Docket 94-1), May 9, 1994. Reply June 29, 1994.
Federal Communications Commission (CC Docket 94-1) with R. Schmalensee, May 9, 1994. Reply June 29, 1994.
New York State Public Service Commission (Case 92-C-0665), panel testimony, October 3, 1994.
State of Maine Public Utilities Commission (Docket Nos. 94-123/94-254), December 13, 1994. Rebuttal January 13, 1995.
Canadian Radio-Television and Telecommunications Commission (Application of Teleglobe Canada for Review of the Regulatory Framework of Teleglobe Canada Inc.), December 21, 1994.
Kentucky Public Service Commission, testimony re concerning telecommunications productivity growth and price cap plans, April 18, 1995.
California Public Utilities Commission (U 1015 C), May 15, 1995. Rebuttal January 12, 1996.

State of Connecticut, Department of Public Utility Control (DPUC Docket No. 95-03-01), June 19, 1995.

Louisiana Public Service Commission (Docket No. U-17949, Subdocket E), July 24, 1995.

California Public Utilities Commission (Investigation No. I.95-05-047), with R.L. Schmalensee and T.J. Tardiff, September 8, 1995. Reply September 18, 1995.

Mississippi Public Service Commission (Docket No. 95-UA-313), October 13, 1995.

Louisiana Public Service Commission (Docket No. U-20883), November 21, 1995.

Federal Communications Commission (CC Docket No. 94-1), with T. Tardiff and C. Zarkadas, December 18, 1995. Reply March 1, 1996.

North Carolina Utilities Commission (Docket No. P-7, Sub 825; P-10, Sub 479), February 9, 1996.

Rhode Island Public Utilities Commission (Docket No. 2370), February 23, 1996. Rebuttal June 25, 1996.

Pennsylvania Public Utility Commission (Docket No. P-00961024), April 15, 1996. Rebuttal July 19, 1996.

Canadian Radio-Television and Telecommunications Commission, in response to CRTC Telecom Public Notice CRTC 96-8 (2 filings), June 10, 1996.

Federal Communications Commission (CC Docket 96-262 et al.), *ex parte* March 1997.

Federal Communications Commission (CC Docket Nos. 93-193, Phase 1, Part 2, 94-65), May 19, 1997.

Vermont Public Service Board (Docket no. 6000), January 19, 1998.

Colorado Public Utilities Commission (Docket No. 97A-540T, January 30, 1998. Rebuttal May 14, 1998.

California Public Utilities Commission, affidavit on economic principles for updating Pacific Bell's price cap plan. Filed February 2, 1998.

California Public Utilities Commission, reply comments on Pacific proposal to eliminate vestiges of ROR regulation and inflation minus productivity factor formula/index, filed June 19, 1998.

Pennsylvania Public Utility Commission (Docket No. P-00981410), October 16, 1998. Rebuttal February 4, 1999.

Comisión Federal de Telecomunicaciones de México ("Cofetel"), "Economic Parameter Values in the Telmex Price Cap Plan," arbitrator's report regarding the renewal of the price cap plan for Telmex, February 15, 1999.

Kentucky Public Service Commission (Docket No. 98-292), April 5, 1999.

Federal Communications Commission (Docket Nos. 94-1, 96-26), January 7, 2000. Reply comments filed January 24, 2000, Ex parte comments filed May 5, 2000.

New Mexico Public Regulation Commission, direct testimony filed December 10, 1999.

Arizona Corporation Commission (Docket No. T-01051B-99-105), rebuttal filed August 21, 2000; rejoinder filed September 19, 2000.

Connecticut Department of Public Utilities (Docket No. 00-07-17), filed November 21, 2000.

Pennsylvania Public Utility Commission (Docket No. P-00981449), filed October 31, 2000. Rebuttal testimony filed February 20, 2001.

NERA Report: Economic Assessment of the Consumer Choice and Fair Competition Telecommunications Amendment (Proposition 108) (with Aniruddha Banerjee and Charles Zarkadas), November 2000.
Canadian Radio-Television and Telecommunications Commission, in response to CRTC Telecom Public Notice CRTC 2000-108, oral panel testimony, January 11, 2001.
Maine Public Utilities Commission (Docket No. 99-851, January 8, 2001. Rebuttal filed February 12, 2001.
Before the Massachusetts Department of Telecommunications and Energy, April 12, 2001. Rebuttal testimony September 21, 2001.
New York Public Service Commission, (Case 00-C-1945), May 15, 2001.
Canadian Radio-Television and Telecommunications Commission (Public Notice CRTC 2001-37), filed May 31, 2001, rebuttal evidence filed September 20, 2001.
The New Jersey Board of Public Utilities (Docket No. TO01020095), February 15, 2001. Rebuttal filed June 15, 2001. Supplemental rebuttal filed September 25, 2001.
Utah Public Service Commission, October 5, 2001. Rebuttal filed November 22, 2001.
New York Public Service Commission, (Case 00-C-1945), (panel testimony), filed February 11, 2002.
State of Rhode Island And Providence Plantations Public Utilities Commission (Docket Nos. 3179 and 3445). Direct testimony filed July 1, 2002 (Docket No. 3179). Rebuttal testimony filed October 22, 2002 (Docket No. 3445).
Massachusetts Department of Telecommunications and Energy (D.T.E. 01-31, Phase II (Track B)). Direct testimony filed August 28, 2002. Rebuttal testimony filed September 18, 2002.
Comisión Federal de Telecomunicaciones de México, "Telmex's 2003-2006 Price Cap Tariff Proposal." Expert report (with A. Ros, G. Martinez and A. Banerjee), filed December 13, 2002.
Pennsylvania Public Utility Commission, (Docket No. P-00032020). Affidavit filed February 3, 2003.
Pennsylvania Public Utility Commission, (Docket No. P-00930715F0002). Rebuttal testimony filed February 4, 2003.

Maine Public Utilities Commission (Docket No. 99-851). Affidavit filed April 29, 2003.

Payphone

California Public Utilities Commission (Case 88-04-029), July 11, 1988.
Illinois Commerce Commission (Docket No. 88-0412), August 3, 1990. Surrebuttal December 9, 1991.
Michigan Public Service Commission (Case No. U-11756), October 9, 1998.
South Carolina Public Service Commission (Docket No. 97-124-C), December 7, 1998.
New Jersey Board of Public Utilities (OAL DOCKET Nos. PUCOT 11269-97N, PUCOT 11357-97N, PUCOT 01186-94N AND PUCOT 09917-98N), March 8, 1999. Surrebuttal June 21, 1999.
Louisiana Public Service Commission (Docket No. U-22632), July 17,2000.

Tennessee Regulatory Authority, Docket No. 97-00409, October 6, 2000.

Economic Costing and Pricing Principles

Florida Public Service Commission (Docket No. 820400-TP), June 25, 1986.
Delaware Public Service Commission (Docket No. 86-20, Phase II), March 31, 1989. Rebuttal November 17, 1989.
Delaware Public Service Commission (Docket No. 89-24T), August 17, 1990.
Florida Public Service Commission (Docket No. 900633-TL), May 9, 1991.
Maryland Public Service Commission (Case No. 8584, Phase II), December 15, 1994. Additional direct testimony May 5, 1995. Rebuttal testimony filed June 30, 1995.
Canadian Radio-Television and Telecommunications Commission, Response to Interrogatory SRCI(CRTC) 1Nov94-906, "Economies of Scope in Telecommunications," January 31, 1995.
Pennsylvania Public Utility Commission (Docket Nos. A-310203F0002, A-310213F0002, A-310236F0002 and A-310258F0002), March 21, 1996.
State of Connecticut, Department of Public Utility Control (DPUC Docket No. 95-06-17), July 23, 1996.
New Jersey Board of Public Utilities (Docket No. TX95120631), August 15, 1996. Rebuttal filed August 30, 1996.
Florida Public Service Commission (Docket No. 980000-SP), September 24, 1998.
Nebraska Public Service Commission, (Application No. C-1628), October 20, 1998. Reply November 20, 1998.
Florida Public Service Commission (Docket No. 980000-SP), November 13, 1998.
Wyoming Public Service Commission (Docket No. 70000-TR-99), April 26, 1999.
New Mexico Public Regulation Commission (Utility Case No. 3147), December 6, 1999, rebuttal testimony filed December 28, 1999.
New Mexico Public Regulation Commission (Case No. 3008, rebuttal testimony filed May 19, 2000.
North Dakota Public Service Commission, (Case No. PU-314-99-119), May 30, 2000.
New Mexico Public Regulation Commission (Case No. 3225, direct testimony filed August 18, 2000. Rebuttal filed September 13, 2000.
New Mexico Public Regulation Commission (Case No. 3300), rebuttal testimony filed October 19, 2000.
Alabama Public Service Commission (Docket Nos. 15957 and 27989), direct testimony filed August 3, 2001. Rebuttal testimony filed August 13, 2001. Additional rebuttal testimony filed August 17, 2001.
The New Jersey Board of Public Utilities (Docket No. TO01020095), February 15, 2001. Rebuttal filed June 15, 2001.
New Hampshire Public Utilities Commission (Docket No. DT 02-111). Rebuttal testimony filed May 2, 2003.

Statistics

Arizona State Air Pollution Control Hearing Board (Docket No. A-90-02), affidavit December 7, 1990.

Expert testimony: Michigan Circuit Court (Case No. 87-709234-CE and 87-709232-CE), *Her Majesty the Queen, et al., v. Greater Detroit Resource Recovery Authority, et al.*, February, 1992.

Expert testimony: United States District Court, Eastern District of New York, *Jancyn Manufacturing Corp. v. The County of Suffolk*, January 11, 1994.

New York Public Service Commission (Case Nos. 93-C-0451 and 91-C-1249), July 23, 1996.

New York Public Service Commission (Cases 95-C-0657, 94-C-0095, 91-C-1174 and 96-C-0036): panel testimony, March 18, 1998. Rebuttal June 3, 1998.

InterLATA Toll Competition

Canadian Radio-Television and Telecommunications Commission (Docket No. 1990-73), November 30, 1990.

Federal Communications Commission (Docket 91-141), August 6, 1991.

Federal Communications Commission (CC Docket 92-141), July 10, 1992.

Federal Communications Commission (In the Matter of Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorization Therefor) with A.E. Kahn, November 12, 1993.

U.S. District Court for the District of Columbia *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, Affidavit with A.E. Kahn, May 13, 1994.

U.S. Department of Justice, *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, August 25, 1994.

Federal Communications *ex parte* filing in CC Docket No. 94-1, March 16, 1995.

Federal Communications Commission (CC Docket No. 79-252) *ex parte* comments with J. Douglas Zona, April 1995.

U.S. Department of Justice in *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, regarding Telefonos de Mexico's provision of interexchange telecommunications services within the United States, affidavit May 22, 1995.

U.S. Department of Justice in *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, regarding provision of interexchange telecommunications services to customers with independent access to interexchange carriers, May 30, 1995.

Expert testimony: *US WATS v. AT&T*, Confidential Report, August 22, 1995. Testimony October 18-20, 25-27, 30, 1995. Rebuttal testimony December 4, December 11, 1995.

Expert testimony: United States District Court for the Northern District of Texas, Dallas Division, Civil Action 394CV-1088D, *Darren B. Swain, Inc. d/b/a U.S. Communications v. AT&T Corp.* Confidential Report, November 17, 1995.

U.S. District Court, Southern District of New York, *Multi Communications Media Inc., v. AT&T and Trevor Fischbach* (96 Civ. 2679 (MBM)), December 27, 1996.
Federal Communications Commission (CC Docket Nos. 96-262 and 96-45), March 18, 1998.
Subcommittee on Communications of the Senate Committee on Commerce, Science and Transportation, *Statement* and oral testimony regarding long distance competition and Section 271 of the Telecommunications Act of 1996, March 25, 1998.
Federal Communications Commission (CC Docket No. 96-262), with P.S. Brandon, October 16, 1998.
Federal Communications Commission (CC Docket No. 96-262) with P.S. Brandon, October 22, 1998.
Montana Public Service Commission (Docket No. D2002.12.153). Filed rebuttal testimony July 18, 2003.

IntraLATA Toll Competition

New Jersey Board of Public Utilities (Docket No. TX90050349), December 6, 1990.
New York Public Service Commission (Case No. 28425) with T.J. Tardiff, May 1, 1992.
New Jersey Board of Regulatory Commissioners (Docket No. TX93060259), Affidavit October 1, 1993.
New Jersey Board of Public Utilities (Docket Nos. TX90050349, TE92111047, TE93060211), April 7, 1994. Rebuttal April 25, 1994. Summary Affidavit and Technical Affidavit April 19, 1994.
Delaware Public Utilities Commission (Docket No. 42), October 21, 1994.
Pennsylvania Public Utility Commission (Docket No. I-940034), panel testimony, December 8, 1994. Reply February 23, 1995. Surrebuttal March 16, 1995.
Public Service Commission of West Virginia (Case No. 94-1103-T-GI), March 24, 1995.
New Jersey Board of Public Utilities (Docket No. TX94090388), April 17, 1995. Rebuttal May 31, 1995.
New York Public Service Commission (Case 94-C-0017), August 1, 1995.
Rhode Island Public Service Commission (Docket No. 2252), November 17, 1995.
Massachusetts Department of Telecommunications and Energy (Docket No. 98-85), October 20, 1998.

Local Competition

Massachusetts Department of Public Utilities (Docket No. D.P.U. 94-185), May 19, 1995. Rebuttal August 23, 1995.
The Public Utilities Commission of Ohio (Case No. 94-1695-TP-ACE), May 24, 1995.
Vermont Public Service Board (Open Network Architecture Docket No. 5713), June 7, 1995. Rebuttal July 12, 1995.
New Jersey Board of Public Utilities (with Kenneth Gordon and Alfred E. Kahn), paper filed in connection with arbitration proceedings, August 9, 1996.

Florida Public Service Commission, "Local Telecommunications Competition: An Evaluation of a Proposal by the Communications Staff of the Florida Public Service Commission," with A. Banerjee, filed November 21, 1997.
Rhode Island Public Utilities Commission (Docket No. 2681), January 15, 1999.
Connecticut Department of Public Utility Control (Docket No. 95-06-17RE02), June 8, 1999.
Florida Public Service Commission (Docket Nos. 020119-TP and 020578-TP). Direct testimony filed October 23, 2002, rebuttal filed November 25, 2002.
Georgia Public Service Commission (Docket No. 11901-U). Rebuttal testimony filed November 8, 2002.
Florida Public Service Commission (Docket No. 020507-TP). Rebuttal testimony filed December 23, 2002.
South Carolina Public Service Commission (Docket Nos. 2002-367-C and 2002-408-C). Direct testimony filed July 23, 2003, Responsive testimony filed July 30, 2003.

Interconnection and unbundling

Federal Communications Commission (Docket 91-141), September 20, 1991.
Maryland Public Service Commission (Case No. 8584) with A.E. Kahn, November 19, 1993. Rebuttal January 10, 1994. Surrebuttal January 24, 1994.
Maryland Public Service Commission (Case No. 8659), November 9, 1994.
Federal Communications Commission (CC Docket No. 95-185), affidavit March 4, 1996.
Federal Communications Commission (CC Docket No. 96-98), videotaped presentation on economic costs for interconnection, FCC Economic Open Forum, May 20, 1996.
New York Public Service Commission (Case 01-C-0767), October 31, 2001.
Federal Communications Commission (CC Docket Nos. 01-338, 96-98, 98-47) (with Aniruddha Banerjee, Charles Zarkadas and Agustin Ros) filed July 17, 2002.
Federal Communications Commission (CC Docket Nos. 01-338, 96-98, 98-47), ex parte on local switching, October 4, 2002.
Federal Communications Commission (CC Docket Nos. 01-338, 96-98, 98-47), ex parte on inter-office transport, October 11, 2002.

Imputation

New Hampshire Public Service Commission (Docket DE 90-002), May 1, 1992. Reply testimony July 10, 1992. Rebuttal testimony August 21, 1992.
Canadian Radio-Television and Telecommunications Commission (Telecom Public Notice CRTC 95-36), August 18, 1995.
Massachusetts Department of Public Utilities (Docket No. D.P.U./D.T.E. 94-185-C), Affidavit February 6, 1998. Reply Affidavit February 19, 1998.
New Jersey Board of Public Utilities (BPU Docket No. TO97100808, OAL Docket No. PUCOT 11326-97N), July 8, 1998. Rebuttal September 18, 1998.
Vermont Public Service Board (Docket No. 6077), November 4, 1998.

Economic Depreciation

Florida Public Service Commission (Docket No. 920385-TL), September 3, 1992.
Louisiana Public Service Commission (Docket No. U-17949, Subdocket E), November 17, 1995. Surrebuttal, December 13, 1995, Further Surrebuttal, January 12, 1996.
Federal Communications Commission (CC Docket No. 98-137), with A. Banerjee, November 23, 1998.

Spectrum

Federal Communications Commission (ET Docket 92-100) with Richard Schmalensee, November 9, 1992.
Federal Communications Commission (Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, PR Docket No. 93-61), with R. Schmalensee, June 29, 1993.

Mergers

U.S. District Court for the District of Columbia, *United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company*, with A.E. Kahn, January 14, 1994.
Vermont Public Service Board (Docket No. 5900), September 6, 1996.
Maine Public Utilities Commission (Docket No. 96-388), September 6, 1996. Rebuttal October 30, 1996.
New Hampshire Public Service Commission (Docket DE 96-220), October 10, 1996.
Federal Communications Commission (Tracking No. 96-0221), with Richard Schmalensee, October 23, 1996.
New York Public Service Commission (Case 96-C-0603), panel testimony, November 25, 1996. Reply December 12, 1996.
Federal Communications Commission (CC Docket No. 97-211), with R. Schmalensee, affidavit March 13, 1998. Reply affidavit May 26, 1998.
Connecticut Department of Public Utility Control, testimony regarding economic aspects of the SBC-SNET proposed change in control, filed June 1, 1998.
Federal Communications Commission (CC Docket No. 98-141), with R. Schmalensee, July 21, 1998. Reply November 11, 1998.
Alaskan Public Utilities Commission (Docket Nos. U-98-140/141/142 and U-98-173/174), February 2, 1999. Rebuttal March 24, 1999.
Pennsylvania Public Utility Commission (Docket Nos. A-310200F0002, A-311350F0002, A-310222F0002, A-310291F0003), April 22, 1999.
State Corporation Commission of Virginia, *In re: Joint Petition of Bell Atlantic Corporation and GTE Corporation for approval of agreement and plan of merger*, May 28, 1999.
Ohio Public Utility Commission (Docket No. 98-1398-TP-AMT), June 16, 1999.
Kentucky Public Service Commission (Docket No. 99-296), July 9, 1999.
Colorado Public Utilities Commission (Docket No. 99A-407T), December 7, 1999.
Iowa Utilities Board, rebuttal testimony, filed December 23, 1999.

Minnesota Public Utilities Commission (Docket No. P3009, 3052, 5096, 421, 3017/PA-99-1192), January 14, 2000.
Washington Utilities and Transportation Commission (Docket No. UT-991358), February 22, 2000.
Montana Public Service Commission (Docket No. D99.8.200), February 22, 2000.
Utah Public Service Commission (Docket No. 99-049-41), February 28, 2000.
Minnesota Public Utilities Commission (Docket No. P3009, 3052, 5096, 421, 3017/PA-99-1192), rebuttal affidavit filed January 14, 2000.
Minnesota Public Utilities Commission (Docket No. P3009, 3052, 5096, 421, 3017/PA-99-1192), direct testimony filed March 29, 2000.
Arizona Corporation Commission (Docket No. T-01051B-99-0497), rebuttal testimony filed April 3, 2000.
Wyoming Public Service Commission (Docket Nos. 74142-TA-99-16, 70000-TA-99-503, 74037-TA-99-8, 70034-TA-99-4, 74089-TA-99-9, 74029-TA-99-43, 74337-TA-99-2, Record No. 5134), rebuttal testimony filed April 4, 2000.
California Public Utilities Commission, (Application No. 02-01-036), testimony regarding the merger between American Water Company and Thames Water, filed May 17, 2002.

Broadband Services

Federal Communications Commission (File Nos. W-P-C 6912 and 6966), August 5, 1994.
Federal Communications Commission (File Nos. W-P-C 6982 and 6983), September 21, 1994.
Federal Communications Commission, affidavit examining cost support for Asymmetric Digital Subscriber Loop (ADSL) video dialtone market trial, February 21, 1995.
Federal Communications Commission, affidavit examining cost support for Bell Atlantic's video dialtone tariff, March 6, 1995.
Federal Communications Commission (File Nos. W-P-C 7074), July 6, 1995.
U.S. District Court for the Eastern District of Virginia (Alexandria Division), *United States Telephone Association, et al., v. Federal Communications Commission, et al.* (Civil Action No. 95-533-A), with A.E. Kahn , affidavit October 30, 1995.
Federal Communications Commission (CC Docket No. 95-145), October 26, 1995. Supplemental Affidavit December 21, 1995.

Federal Communications Commission (CC Docket No. 96-46), *ex parte* affidavit, April 26, 1996.
Federal Communications Commission (CC Docket No. 96-112), affidavit filed May 31, 1996.
Federal Communications Commission (CC Docket No. 96-112), affidavit June 12, 1996.
Federal Communications Commission (CC Docket No. 96-46), July 5, 1996.
Pennsylvania Public Utility Commission, "Promises Fulfilled; Bell Atlantic-Pennsylvania's Infrastructure Development," filed January 15, 1999 (with Charles J. Zarkadas, Agustin J. Ros, and Jaime C. d'Almeida).

Maryland Public Service Commission (Case No. 8927), Rebuttal testimony, September 24, 2002. Supplemental rebuttal testimony filed March3, 2003. Surrebuttal testimony filed April 11, 2003.

Rate Rebalancing

Canadian Radio-Television and Telecommunications Commission, Implementation of Regulatory Framework and Related Issues, Telecom Public Notices CRTC 94-52, 94-56 and 94-58, February 20, 1995.
Pennsylvania Public Utility Commission (Docket No. R-00963550), April 26, 1996. Rebuttal July 5, 1996.
Pennsylvania Public Utility Commission (Docket No. R-963550 C0006), August 30, 1996.
Public Utilities Commission of Ohio (Case No. 96-899-TP-ALT), February 19, 1997.
Pennsylvania Public Utility Commission on behalf of Verizon-PA Inc. and Verizon North Inc. Surrebuttal testimony (proprietary) filed August 4, 2003.
Florida Public Service Commission (Docket No. 030869-TL). Direct testimony filed August 27, 2003.

Universal Service

Louisiana Public Service Commission (Docket No. U-20883, Subdocket A), August 16, 1995.
Tennessee Public Service Commission (Docket No. 95-02499), October 20, 1995. Rebuttal October 25, 1995. Supplementary direct October 30, 1995. Supplementary rebuttal November 3, 1995.
Mississippi Public Service Commission (Docket No. 95-UA-358), January 17, 1996. Rebuttal February 28, 1996.
Federal Communications Commission (CC Docket No. 96-45) with Kenneth Gordon, April 12, 1996.
Federal Communications Commission (CC Docket No. 96-45) with Aniruddha Banerjee, August 9, 1996.
Federal-State Joint Board (CC Docket No. 96-45), *Remarks on Proxy Cost Models*, videotape filed January 14, 1997.
New Jersey Board of Public Utilities (Docket No. TX95120631), September 24, 1997. Rebuttal October 18, 1997.
Pennsylvania Public Utility Commission (Docket No. I-00940035), October 22, 1997.
Alabama Public Service Commission (Docket No. 25980), February 13, 1998.
North Carolina Utilities Commission (Docket No. P-100, SUB 133g), February 16, 1998. Rebuttal April 13, 1998.
Mississippi Public Service Commission (Docket No. 98-AD-035), February 23, 1998. Rebuttal March 6, 1998.
Tennessee Regulatory Authority (Docket No. 97-00888), April 3, 1998. Rebuttal April 9, 1998.
Florida Public Service Commission (Docket No. 980696-TP), September 2, 1998.
Georgia Public Service Commission (Docket No. 5825-U), September 8, 2000.

Classification of Services as Competitive

Maryland Public Service Commission (Case No. 8462), October 2, 1992.
State Corporation Commission of Virginia (Case No. PUC 950067), January 11, 1996.
Maryland Public Service Commission (Case No. 8715), March 14, 1996. Surrebuttal filed April 1, 1996.
Federal Communications Commission (File No. SCL-97-003), December 8, 1997.
Pennsylvania Public Utility Commission (Docket No. P-00971307, February 11, 1998. Rebuttal February 18, 1998.
State of Connecticut, Department of Public Utility Control (Docket No. 98-02-33), February 27, 1998.
The New Jersey Board of Public Utilities (Docket No. TO 99120934), May 18, 2000.
Washington Transportation and Utilities Commission, (Docket No. UT-000883). October 6, 2000.
New York Public Service Commission, (Case 00-C-1945), May 15, 2001.
The New Jersey Board of Public Utilities (Docket No. TO01020095), February 15, 2001. Rebuttal filed June 15, 2001.
Federal Communications Commission (CC Docket Nos. 99-273, 92-105, 92-237), Affidavit: "Competition and Regulation for Directory Assistance Services" (with Harold Ware). Filed April 1, 2002.
New Jersey Board of Public Utilities (Docket No. TT97120889), on behalf of Verizon – New Jersey, updated rebuttal testimony (with Michael Falkiewicz) filed February 13, 2003.

Costing and Pricing Resold Services and Network Elements

Science, Technology and Energy Committee of the New Hampshire House of Representatives, "An Economic Perspective on New Hampshire Senate Bill 77," April 6, 1993.
Tennessee Public Service Commission (Docket No. 96-00067), May 24, 1996. Refiled with the Tennessee Regulatory Authority (Docket No. 96-00067), August 23, 1996.
New York Public Service Commission (Case Nos. 95-C-0657, 94-C-0095, 91-C-1174), May 31, 1996. Additional testimony June 4, 1996. Rebuttal July 15, 1996.
Louisiana Public Service Commission (Docket No. U-U-22020), August 30 1996. Rebuttal September 13, 1996.
Tennessee Regulatory Authority (Docket No. 96-01331), September 10, 1996. Rebuttal September 20, 1996.
New Jersey Board of Public Utilities (Docket No. TO96070519), September 18, 1996.
Pennsylvania Public Utility Commission (Docket No. A-310258F0002), September 23, 1996.
Massachusetts Department of Public Utilities (Docket Nos. D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94), September 27, 1996. Rebuttal October 16, 1996.
New Jersey Board of Public Utilities (Docket No. TX95120631), September 27, 1996.
New Hampshire Public Service Commission (Docket DE 96-252), October 1, 1996.
Massachusetts Department of Public Utilities (Docket Nos. D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94), October 11, 1996. Rebuttal October 30, 1996.

Federal Communications Commission (CC Docket No. 96-45), October 15, 1996.
New Hampshire Public Service Commission (Docket DE 96-252), October 23, 1996.
New Jersey Board of Public Utilities (Docket No. T096080621), November 7, 1996.
Alabama Public Service Commission (Docket No. 25677), November 26, 1996.
Delaware Public Utilities Commission, testimony re costs and pricing of interconnection and network elements, December 16,1996. Rebuttal February 11, 1997.
State Corporation Commission of Virginia, (Case No. PUC960), December 20,1996. Rebuttal June 10, 1997 (Case No. PUC970005).
Public Service Commission of Maryland (Case No. 8731-II), January 10, 1997. Rebuttal April 4, 1997.
Public Service Commission of the District of Columbia (Case No. 962), January 17, 1997. Rebuttal May 2, 1997.
Connecticut Department of Public Utilities (DPUC Docket No. 96-09-22), January 24, 1997.
Connecticut Department of Public Utilities (DPUC Docket No. 96-11-03), February 11, 1997.
Federal Communications Commission, response to FCC Staff Report on issues regarding Proxy Cost Models. Filed February 13, 1997.
Public Service Commission of West Virginia (Case Nos. 96-1516-T-PC, 96-1561-T-PC, 96-1009-T-PC, and 96-1533-T-T), February 13, 1997. Rebuttal February 20, 1997.
Public Utilities Commission of Ohio (Case No. 97-152-TP-ARB), April 2, 1997.
Maine Public Utilities Commission (Docket No. 97-505), April 21, 1997. Rebuttal October 21, 1997.
Vermont Public Service Board (Docket No. 5713), July 31, 1997. Rebuttal January 9, 1998. Surrebuttal February 26, 1998. Supplemental rebuttal March 4, 1998.
State of Connecticut, Department of Public Utility Control (Docket Nos. 95-03-01,95-06-17 and 96-09-22), August 29, 1997. Rebuttal December 17, 1998.
Alabama Public Service Commission (Docket No. 26029), September 12, 1997.
Tennessee Regulatory Authority (Docket No. 97-01262), October 17, 1997.
South Carolina Public Service Commission (Docket No. 97-374-C), November 25, 1997.
Rhode Island Public Utilities Commission, direct testimony re costing and pricing principles for interconnection and unbundled network elements filed November 25, 1997.
North Carolina Utilities Commission (Docket No. P-100, SUB 133d), December 15, 1997. Rebuttal March 9, 1998.
Massachusetts Department of Public Utilities (Docket No. DTE 98-15), January 16, 1998.
Mississippi Public Service Commission (Docket No. 97-AD-544, March 13, 1998.
New Hampshire Public Service Commission (Docket No. 97-171, Phase II), March 13, 1998. Rebuttal April 17, 1998.
Massachusetts Department of Telecommunications and Energy (D.P.U. 96-3/74, 96-75, 96-80/81, 96-83, & 96-94), April 29, 1998.
Massachusetts Department of Telecommunications and Energy (Docket No. 85-15, Phase III, Part 1), August 31, 1998.
Massachusetts Department of Telecommunications and Energy (Docket No. 98-15, Phase II), September 8, 1998.
Rhode Island Public Utilities Commission (Docket No. 2681), September 18, 1998.
Maryland Public Service Commission (Case No. 8786), November 16, 1998.

New Hampshire Public Utilities Commission (Docket No. 99-018), April 7, 1999. Rebuttal April 23, 1999.

Massachusetts Department of Telecommunications & Energy (Docket No. 94-185-E), July 26, 1999.

New York Public Service Commission, (Case 98-C-1357), February 7, 2000. Panel Rebuttal Testimony filed October 19, 2000.

The New Jersey Board of Public Utilities (Docket No. TO00060356), July 28, 2000.

Massachusetts Department of Telecommunications and Energy (Docket DTE –1-20), direct testimony filed May 4, 2001.

The Public Service Commission of Maryland (Case No. 8879), May 25, 2001, rebuttal September 5, 0021. Surrebuttal October 15, 2001.

Public Service Commission of the District of Columbia (Case No. 962), July 16, 2001.

Rhode Island Public Utilities Commission (Docket No. 2681), May 1, 2002.

Commerce Commission of New Zealand on behalf of New Zealand Telecom, "The Wholesale Discount" En banc hearings February 10, 2003.

Bell Entry into InterLATA Markets

Federal Communications Commission (CC Docket No. 96-149), affidavit, August 15, 1996.

Federal Communications Commission (Docket No. 96-149) with Paul B. Vasington, November 14, 1996.

Georgia Public Service Commission (Docket No. 6863-U), January 3, 1997. Rebuttal February 24, 1997.

Pennsylvania Public Utility Commission, statement regarding costs and benefits from Bell Atlantic entry into interLATA telecommunications markets, February 10, 1997. Rebuttal March 21, 1997.

New York Public Service Commission, "Competitive Effects of Allowing NYNEX To Provide InterLATA Services Originating in New York State," with Harold Ware and Richard Schmalensee, February 18, 1997.

Delaware Public Utilities Commission, statement regarding costs and benefits from Bell Atlantic entry into interLATA telecommunications markets, filed February 26, 1997. Rebuttal April 28, 1997.

New Jersey Board of Public Utilities (Docket No. T097030166), March 3, 1997. Reply May 15, 1997.

Federal Communications Commission (CC Docket 96-262 *et al.*), with Richard Schmalensee, Doug Zona and Paul Hinton, *ex parte* March 7, 1997.

Public Service Commission of Maryland, statement regarding consumer benefits from Bell Atlantic's provision of interLATA service, filed March 14, 1997.

Louisiana Public Service Commission, (Docket No. U-22252), March 14, 1997. Rebuttal May 2, 1997. Supplemental testimony May 27, 1997.

Public Service Commission of West Virginia, economic analysis of issues regarding Bell Atlantic's entry into the interLATA long distance market. Filed March 31, 1997.

South Carolina Public Service Commission (Docket No. 97-101-C), April 1, 1997. Rebuttal June 30, 1997.

Kentucky Public Service Commission (Administrative Case No. 96-608), April 14, 1997. Rebuttal April 28, 1997. Supplemental rebuttal August 15, 1997.

Federal Communications Commission (CC Docket No. 96-149), April 17, 1997.

Maine Public Utilities Commission, affidavit regarding competitive effects of NYNEX entry into interLATA markets, with Kenneth Gordon, Richard Schmalensee and Harold Ware, filed May 27,1997.

Alabama Public Service Commission (Docket No. 25835), June 18, 1997. Rebuttal August 8, 1997.

North Carolina Utilities Commission (Docket No. P-55, Sub1022), August 5, 1997. Rebuttal September 15, 1997.

Mississippi Public Service Commission (Docket No. 97-AD-0321), July 1, 1997. Rebuttal September 29, 1997.

Federal Communications Commission, CC Docket No. 99-295. Filed September 29, 1999.

Federal Communications Commission, *In the Matter of Application by Verizon New England Inc., et. al. for Authorization to Provide In-Region, InterLATA Services in Massachusetts*, September 19, 2000, Reply Declaration filed November 3, 2000. Supplemental Reply Declaration filed February 28, 2001.

Pennsylvania Public Utility Commission, (Docket No. M-00001435), January 8, 2001.

Federal Communications Commission, *In the Matter of Application by Verizon New England Inc., et. al. for Authorization to Provide In-Region, InterLATA Services in Connecticut*, May 24, 2001.

Federal Communications Commission, *In the Matter of Application by Verizon Pennsylvania Inc., et. al. for Authorization to Provide In-Region, InterLATA Services in Pennsylvania*, June 21, 2001.

Alabama Public Service Commission (Docket No. 25835), June 19, 2001.

Louisiana Public Service Commission (Docket No. U-22252-E), reply affidavit filed June 25, 2001.

South Carolina Public Service Commission (Docket No. 2001-209-C), July 16, 2001.

Alabama Public Service Commission (Docket No. 25835), rebuttal testimony filed June 19, 2001.

Kentucky Public Service Commission (Docket No. 2001-105), July 30, 2001.

Mississippi Public Service Commission (Docket No. 97-AD-321), August 2, 2001.

Florida Public Service Commission (Docket No. 960786-TL, August 20, 2001.

North Carolina Utilities Commission (Docket No. P-55, SUB 1022), October 8, 2001.

Federal Communications Commission (CC Docket No. 01-277), (Georgia-Louisiana) November 13, 2001.

Minnesota Public Utilities Commission (PUC Docket No. P-421/C1-01-1372, OAH Docket No. 7-2500-14487-2) affidavit filed December 28, 2001, Surrebuttal Affidavit filed January 16, 2002.

Regulatory Reform

Federal Communications Commission (CC Docket No. 80-286), December 10, 1997.

Federal Communications Commission, *In the Matter of United States Telephone Association Petition for Rulemaking—1998 Biennial Regulatory Review*, with Robert W. Hahn, filed September 30, 1998.

Reciprocal Compensation

Massachusetts Department of Telecommunications and Energy (Docket No. 98-67), September 25, 1998.
Washington Public Utilities Commission (Docket No. UT-990300), February 24, 1999. Rebuttal March 8, 1999.
Colorado Public Utilities Commission (Docket No. 99A-001T), March 15, 1999.
Massachusetts Department of Telecommunications and Energy (Docket No. D.T.E. 97-116-B), March 29, 1999.
North Carolina Utilities Commission (Docket No. P-500, Sub 10), July 9, 1999.
North Carolina Utilities Commission (Docket No. P-561, Sub 10), July 30, 1999.
Public Service Commission of South Carolina (Docket No. 1999-259-C), August 25, 1999.
Louisiana Public Service Commission (Docket No. U-24206), September 3, 1999.
Florida Public Service Commission (Docket No. 990750-TP), September 13, 1999.
New Mexico Public Regulation Commission (Case No. 3131), October 13, 1999.
Alabama Public Service Commission (Docket No. 27091), October 14, 1999.
Tennessee Regulatory Authority (Docket No. 99-00377), October 15, 1999.
Tennessee Regulatory Authority (Docket No. 99-00430), October 15, 1999.
Mississippi Arbitration Panel (Docket No. 99-AD421), October 20, 1999.
Kentucky Public Service Commission (Case No. 99-218), October 21, 1999.
Georgia Public Service Commission (Docket No. 10767-U), October 25, 1999.
Oregon Public Utility Commission (Arb. 154), November 5, 1999.
Federal Communications Commission (Docket No. 99-68), "An Economic and Policy Analysis of Efficient Intercarrier Compensation Mechanisms for Internet-Bound Traffic," *ex parte*, November 12, 1999 (with A. Banerjee and A. Ros). Reply Comments: "Efficient Inter-Carrier Compensation for Internet-Bound Traffic," (with A. Banerjee), October 23, 2000.
Georgia Public Service Commission (Docket No. 10854-U), November 15, 1999, rebuttal testimony filed November 22, 1999.
Idaho Public Utilities Commission (Docket No. GST-T-99-1), November 22, 1999, rebuttal testimony filed December 2, 1999.
Texas Public Utility Commission (Docket No. 21982), March 15, 2000, rebuttal testimony filed March 31, 2000.
Arizona Corporation Commission (Docket Nos. T-02432B-00-0026, T-01051B-00-0026), March 27, 2000, rebuttal testimony filed April 3, 2000.
Colorado Public Utilities Commission (Docket No. 00B-011T), direct testimony filed March 28, 2000.
Pennsylvania Public Utility Commission (Docket No. A-310620F0002), April 14, 2000, rebuttal testimony filed April 21, 2000.
Delaware Public Service Commission (PSC Docket No. 00-205), filed April 25, 2000.
Virginia State Corporation Commission, filed April 25, 2000.

The New Jersey Board of Public Utilities (Docket No. TO 00031063) Direct testimony filed April 28, 2000, rebuttal testimony filed May 5, 2000.

Washington Utilities and Transportation Commission (Docket No. UT-003006). Filed April 26, 2000. Rebuttal testimony filed May 10, 2000. Surrebuttal testimony filed May 26, 2000.

The New Jersey Board of Public Utilities (Docket No. TO 00031063). Filed April 28, 2000. Rebuttal testimony filed May 5, 2000.

Federal Communications Commission, (CC Docket Nos. 96-98, 95-185, WT Docket No. 97-207), "Reciprocal Compensation for CMRS Providers," June 13, 2000 (with Charles Jackson).

Colorado Public Utilities Commission (Docket No. 00B-103T), June 19, 2000.

Federal Communications Commission, *In the Matter the Remand of the Commission's Reciprocal Compensation Declaratory Ruling by the U.S. Court of Appeals for the D.C. Circuit* (CC Docket Nos. 96-98, 99-68), July 21, 2000. Reply August 4, 2000.

Montana Department of Public Service Regulation (Docket No. D2000.6.89), July 24, 2000. Rebuttal filed February 7, 2001.

Washington Utilities and Transportation Commission (Docket 003013 Part B), filed August 4, 2000. Rebuttal filed February 7, 2001.

Nebraska Public Service Commission, (Docket No. C-2328), September 25, 2000. Rebuttal testimony filed October 4, 2000.

Montana Department of Public Service Regulation (Docket No. D2000.8.124: TouchAmerica Arbitration), October 20, 2000. Rebuttal filed December 20, 2000.

Arizona Corporation Commission (Docket Nos. T-03654A-00-0882,T-01051B-00-0882), January 8, 2001.

Florida Public Service Commission (Docket No. 000075-TP), filed January 10, 2001.

Colorado Public Utilities Commission (Docket No. 00B-601T), filed January 16, 2001.

Utah Public Service Commission (Docket No. 00-999-05), filed February 2, 2001. Rebuttal testimony filed March 9, 2001.

Arizona Corporation Commission (Docket No. T-00000A-00-0194, Phase 2), March 15, 2001.

Florida Public Service Commission (Docket No. 000075-TP), filed April 12, 2001.

Federal Communications Commission (CC Docket No. 01-92), with Aniruddha Banerjee, filed November 5, 2001.

Contract Services

Superior Court Department of the Trial Court (Civil Action No. 95-6363F), affidavit, July 1996.

Connecticut Department of Public Utilities (Docket No. 99-03-17), June 18, 1999.

American Arbitration Association, New York, *MCI WorldCom Communications Inc. v Electronic Data Systems, Corporation,* Expert Report June 25, 2001. Supplemental Expert Report July 13, 2001.

Service Quality Performance Plans

Georgia Public Service Commission (Docket No. 7892-U), June 27, 2000.
Florida Public Service Commission (Docket No. 000121-TP), March 1, 2001. Rebuttal filed March 21, 2001. Rebuttal in Phase II filed April 19, 2001.
North Carolina Utilities Commission (Docket No. P-100 Sub 133k), May 21, 2001.
South Carolina Public Service Commission (Docket No. 2001-209-C), July 16, 2001. Additional direct testimony filed March 5, 2003.
Kentucky Public Service Commission (Docket No. 2001-105), July 30, 2001. Surrebuttal September 10, 2001.
Mississippi Public Service Commission (Docket No. 97-AD-321), August 2, 2001.
Tennessee Regulatory Authority, (Docket No. 01-00193), August 10, 2001.

Miscellaneous

New Mexico Public Regulation Commission (Utility Case No. 3147), December 6, 1999.
New Mexico Public Regulation Commission (Utility Case No. 3008), May 19, 2000.
United States District Court, District of Nevada (Case No. CV-S-99-1796-KJD(RJJ), December 28, 2000.
United States Bankruptcy Court, Northern District of Illinois, Eastern Division, Telesphere Liquidating Trust vs. Francesco Galesi, Adv. Proc. Nos. 95 A 1051 & 99 A 131. Report filed August 23, 2002.
Affidavit on Behalf of Bell Atlantic-Maryland, Inc. (Case No. CAL 99-21004). Filed October 15, 2002.
United States District Court for the District of Columbia, (MDL No. 1285, Misc. No 99-0197 (TFH)), Declaration filed October 31, 2002. Reply Declaration filed January 15, 2003.
American Arbitration Association, on behalf of Verizon – New York, direct testimony regarding events in telecommunications markets affecting employment. February 2003.
Washington Utilities and Transportation Commission (Docket No. UT-02-11-20). Rebuttal testimony filed April 17, 2003.
New Hampshire Public Utilities Commission (Docket No. DT 02-165). Rebuttal testimony filed June 4, 2003.

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DOCKET # 14232
DOCUMENT # 62352

DOCKET NO. 14232-U

IN RE: Adoption of Proposed Amendments to Utility Rule 515-12-1-.34, Code of Conduct for Winback Activities.

BY THE COMMISSION:

All interested parties are hereby notified pursuant to Ga. Laws 1964, pp. 338, 342, as amended (Official Code of Georgia Annotated ("O.C.G.A.") § 50-13-4) that the Georgia Public Service Commission ("Commission") has considered and adopted rule amendments governing the filing of tariffs. The new rule shall become effective as provided by law twenty days after its adoption pursuant to the Commission's regularly scheduled Administrative Session on March 18, 2003 and subsequent filing with the Secretary of State.

Whereas, during the regularly scheduled Administrative Session on March 18, 2003, the Commission approved the adoption of its Utility Rule 515-12-1-.34 as contained in the February 6, 2003 written notice of proposed rulemaking, without change; and

Whereas, a copy of the written notice of the proposed rule was mailed to all interested persons on the telecommunications mailing list of the Commission pursuant to O.C.G.A. § 50-13-4(a)(1); and

Whereas, copies of said notice were furnished to the Legislative Counsel of the State of Georgia, pursuant to said O.C.G.A. § 50-13-4(e); and

Whereas, the Commission received comments from parties regarding the proposed rule amendments that were duly considered,

WHEREFORE, it is

ORDERED, that effective March 18, 2003 the proposed amendments to Utility Rule 515-12-1-.34 are hereby approved and adopted as shown below:

RULES OF THE GEORGIA PUBLIC SERVICE COMMISSION
515-12 TELEPHONE SERVICE

CHAPTER 515-12-1-.34

515-12-1-.34 Code of Conduct for Winback Activities.

(1) Definitions

(a) Customer: Any person, firm partnership, corporation, municipality, cooperative, organization, governmental agency, etc., provided with telecommunications services by a Local Exchange Company.

(b) Local Exchange Company ("LEC") or Local Service Provider: A telecommunications company certified by the Commission to provide local exchange services (as defined in O.C.G.A. Section 46-5-162(11)).

(c) Proprietary Information: Information received by one LEC ("the receiving LEC") from another LEC ("the providing LEC") that: (i) the providing LEC reasonably designates as proprietary and confidential; or (ii) the receiving LEC has reason to believe the providing LEC intends to be treated as proprietary and confidential.

(d) Telecommunications service: Any service within the definition of "telecommunications service" set forth in O.C.G.A. Section 46-5-162(18).

(2) Nondiscrimination

(a) No LEC shall represent, state, or imply that the sale, lease or use of any product or service provided by the LEC or any affiliate, agent or representative is conditioned upon the purchase, lease, use or continuation of any other product or service from such LEC or affiliate, agent or representative of such LEC if:

(i) such LEC or its affiliate, agent or representative does not in fact impose such condition; or

(ii) such LEC or its affiliate, agent or representative is prohibited by applicable law, rule, regulation, order or tariff from imposing such condition.

(b) Nothing herein shall preclude a LEC from bundling telecommunications services with other services as permitted by applicable law.

(3) Employee Conduct

(a). LECs are prohibited from disparaging or degrading a competitor or its services or employees and must implement training, practices, and policies to comply with this requirement. In addition, no LEC employee, representative or agent while processing an order for the installation or while engaged in the actual installation, repair or restoration of service or equipment on behalf of another LEC shall either directly or indirectly:

(i) represent to any customer that such repair or restoration of service would have occurred sooner if the end-user had obtained service from the LEC of which such individual is an employee, representative or agent; or

(ii) promote the service of the LEC of which such individual is an employee, representative or agent to the customer.

(4) Marketing

(a) No LEC shall make or disseminate or cause to be made or disseminated before the public by means of any media or advertising device or by public outcry or proclamation or any other manner or means any statement concerning its provision of any telecommunications service, or concerning any circumstances or matter of fact connected with the proposed performance or disposition thereof which is untrue or fraudulent and which is known or which by the exercise of ordinary care should be known to be untrue or fraudulent.

(b) LECs shall comply with all applicable state and federal laws, rules and regulations concerning end user customer privacy.

(c) Consistent with the Federal Trade Commission (FTC) "Statement on Deceptive Advertising," LECs shall comply with the following requirements in marketing their telecommunications services:

(i) When an advertisement makes claims that are not directly false but might be misleading in the absence of qualifying or limiting information, the LEC is responsible for ensuring that the advertisement disclosures such qualifying or limiting information and that such disclosures are conspicuous;

(ii) A LEC must ensure that claims in an advertisement related to price must be clearly and conspicuously disclosed, including any monthly fees, minimum per-call charges, or any other information that significantly affects the total charge for the service, calling plan, or call; and

(iii) A LEC must clearly and conspicuously disclose in an advertisement any significant conditions or limitations on the availability of the advertised price.

(d) A LEC shall not misrepresent itself or any other affiliate in a manner that is misleading to an end user customer relative to the services it provides.

(e) A LEC shall not knowingly make unfair or inaccurate comparisons of services offered by another LEC. In making a comparison of the LEC's prices to the prices offered by a competitor, the LEC is making an implied representation that such prices are current and the LEC must have a reasonable basis for this representation.

(5) Transfer of Service

(a) Subject to all applicable rules, regulations, and orders, no LEC

shall:

(i) prevent an end user customer from changing from one LEC to another LEC in an efficient and reasonable manner;

(ii) interfere with an end user customer's selection of another local service provider; or

(iii) cause a change of an end user customer's local service provider without that customer's consent.

(6) Information Sharing and Disclosure

(a) Each LEC has a duty to protect the confidentiality of proprietary information of, and relating to, any other LEC.

(b) Any LEC that receives or obtains proprietary information from another LEC for the purposes of providing any telecommunications service shall use such information only for such purpose, and shall not use such information for its own marketing efforts.

(7) Operational Requirements

(a) LECs shall maintain and have on file with this Commission customer service contact information and a company contact escalation list. This information shall be filed on an annual basis, except that LECs shall file any changes to this information on a quarterly basis. The date for the annual filing shall be March 31^{st} of each year. LECs shall make this information available to other LECs.

(b) When an end user customer has switched local service providers, the content of the original provider's final bill may not contain any information that can reasonably be construed as an attempt to target the customer, and ultimately dissuade the customer from moving to their new provider.

(c) LECs that receive "misdirected calls" from former end user customers (*e.g.*, customers who are trying to reach their current local service provider, but have in error reached their previous provider) must either transfer the customer to the current serving LEC or provide a contact number for that carrier.

(8) Winbacks

(a) LECs shall observe a seven-day "waiting" period before attempting to win back customers from other LECs.

(b) This "waiting" period begins on the date of completion for the disconnect order that stops billing the end user as a retail customer of the original LEC and continues for seven (7) calendar days.

(c) During this "waiting" period, the original LEC must not contact the customer in an effort to win the customer back.

(d) The "waiting" period does not apply when the LEC receives inbound calls from end user customers who have either switched, are in the process of switching, or are considering, switching their local service provider.

(9) Preferred Local Carrier Freeze

LECs shall not provide or offer a preferred local carrier freeze.

Authority O.C.G.A. §§ 46-2-20, 46-5-161, 46-5-168(a), 16-5-169(4).

ORDERED FURTHER, that said adopted rule having been published in accordance with the requirements of the Administrative Procedures Act as provided in O.C.G.A. § 50-13-3(b)4 shall not stay the effective date of this Order, unless otherwise ordered by the Commission.

ORDERED FURTHER, that a motion for reconsideration, rehearing, or oral argument or any other motion shall not stay the effective date of this Order, unless otherwise ordered by the Commission.

ORDERED FURTHER, that jurisdiction over this matter is expressly retained for the purpose of entering such further Order or Orders as this Commission may deem just and proper.

The above by action of the Commission in Administrative Session on the 18th day of March 2003.

Reece McAlister
Executive Secretary
3-21-03
Date

Robert B. Baker, Jr.
Robert B. Baker, Jr.
Chairman
March 21, 2003
Date

Is Phone "Competition at the Crossroads?": An Analysis of the Consumer Federation of America's Local Competition Study

C|E|I competitive enterprise institute

New Millennium Research Council

December 2003

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Preface

This report is a project of the Competitive Enterprise Institute,[1] a non-profit public policy organization dedicated to the principles of free enterprise and limited government, and the New Millennium Research Council (NMRC)[2], established in 1999 to foster policy research focused on developing workable, real-world solutions to the issues facing policymakers primarily in the fields of telecommunications and technology.

In this report, CEI and NMRC continue to explore telecommunications policy issues by providing reviews from noted telecommunications experts to an October 2003 study released by the Consumer Federation of America (CFA) entitled, *Competition at the Crossroads: Can Public Utility Commissions Save Local Phone Competition?*

The CFA study presents a range of arguments for states to ensure that unbundled network elements (UNEs) are made available to competitors of the traditional incumbent local exchange carriers (ILECs). The CFA study concludes that the availability of UNEs has fostered local voice telephone competition and benefited consumers with lower prices. Thus far, the CFA study's findings and conclusions have not been publicly scrutinized by academics or telecommunications experts. Having previously examined the effects of UNEs in the states, the CEI and NMRC undertook this critique to assess the basis of the CFA study claims.

This report presents the views of two telecommunications experts – Solveig Singleton, Senior Policy Analyst for the Competitive Enterprise Institute and Stephen B. Pociask, President of TeleNomic Research, LLC. Each reviews, qualitatively and quantitatively, the CFA study's assertions, claims, and recommendations and provides insightful perspectives on the role that UNEs play in local phone competition, consumer benefits, and network investment.

Ms. Singleton provides a thematic review of the CFA study, focusing on the CFA study's assertions regarding telecommunications investment, network competition, long distance entry by ILECs, and regulatory price controls. Mr. Pociask complements this analysis with a point-by-point critique of the study's quantitative findings and conclusions. Mr. Pociask also provides new data sources to compare and contrast against those provided by CFA.

CEI and NMRC publish this report at a very critical juncture for the telecommunications industry. The Federal Communications Commission issued its Triennial Review Order (TRO) in August 2003 and delegated to the states the complex issues surrounding the availability of UNEs. The TRO provides tight deadlines for states to conduct UNE proceedings and the outcomes will have a tremendous impact on the future of the telecommunications industry. We hope this report provides regulators with more information to make these critical decisions.

The Competitive Enterprise Institute and the New Millennium Research Council wish to thank the authors for their time and insight on these critical and timely issues.

December 2003

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[1] To learn more about the Competitive Enterprise Institute, visit www.cei.org.
[2] See our website at www.newmillenniumresearch.org for copies of the reports and transcripts of prior events.

Author Biographies

Solveig Singleton is a lawyer and senior policy analyst with the Competitive Enterprise Institute's Project on Technology and Innovation. Ms. Singleton is the former director of information studies for the Cato Institute. She also served as vice chair of publications for the Telecommunications and Electronic Media Practice Group of the Federalist Society for Law & Public Policy Studies from 1996-1999. Her articles have appeared in The Washington Post, The Philadelphia Inquirer, The Wall Street Journal, The Journal of Commerce, Internet Underground, and Hot-Wired, as well as in many academic journals. She is the co-editor of two books, Regulators' Revenge (1998) and Economic Casualties (1999). Her undergraduate degree is from Reed College, where she majored in philosophy. She then graduated cum laude from Cornell Law School and worked for two years at a telecommunications law firm.

Stephen B. Pociask is president of TeleNomic Research, LLC and has worked in and consulted for telecommunications and high-tech industries for over twenty years. Mr. Pociask conducts a wide variety of applied economic studies, including those dealing with public policy, regulatory economics, and antitrust issues. He has provided consulting primarily for high tech firms, including those providing high-speed Internet services, local and long distance services. He has appeared numerous times in the media, including Bloomberg News, CNBC, Telecommunications Reports, Telephony, Congressional Quarterly, Americas Network, Network Magazine, and CNET Radio. From 1998 to 2000, Mr. Pociask was Chief Economist and Executive Vice President for Joel Popkin and Co., an economic consulting firm in Washington, DC. Prior to this assignment, he worked eighteen years in the telecommunications industry. He has completed his Ph.D. coursework in economics and has an M.A. in economics from George Mason University.

About the Competitive Enterprise Institute
The Competitive Enterprise Institute is a non-profit public policy organization founded in 1984 and dedicated to the principles of free enterprise and limited government. CEI is nationally recognized as a leading voice on a broad range of regulatory issues ranging from environmental laws to antitrust policy to regulatory risk with nearly 40 policy experts and other staff. CEI produces groundbreaking research on regulatory issues. CEI is actively engaged in many phases of the public policy debate. CEI reaches out to the public and the media to ensure that its ideas are heard, works with policymakers to ensure that the ideas are implemented and, when necessary, takes its arguments to court to ensure the law is upheld. This "full service approach" to public policy helps make CEI an effective and powerful force for economic freedom. Go to www.cei.org for more information.

About the New Millennium Research Council
The New Millennium Research Council (NMRC) was established in 1999 to foster policy research focused on developing workable, real-world solutions to the issues facing policymakers, primarily in the fields of telecommunications and technology. The Council consists of independent academics and researchers who are experts in their fields. Both seated experts and invited scholars author NMRC reports. Over the past few years, the NMRC has investigated a range of issues related to competition in the telecommunications industry. The NMRC has also sponsored a number of roundtable events in Washington, D.C., and legislative briefings on various topics. Go to www.newmillenniumresearch.org for more information.

Executive Summary

On October 7, 2003 the Consumer Federation of America (CFA) released a study entitled, *Competition at the Crossroads: Can Public Utility Commissions Save Local Phone Competition?* The study found that local telephone company arguments for higher wholesale prices for leasing parts of their networks and for reduced access to these so-called unbundled network elements (UNEs) would spell the "end of local phone competition" and "the real savings being enjoyed by consumers across the country." To support its findings, the CFA study disputed three arguments it said are used by the Regional Bell Operating Companies for raising UNE wholesale prices and for restricting the availability of UNEs.

- **Claim 1** – Competition would be stimulated if local incumbents were allowed to enter the long distance market before new market entrants have established access to the existing telephone network;
- **Claim 2** – UNE prices do not adequately reflect costs, and represent a 'subsidy' to competitors; and
- **Claim 3** – Withdrawing access to UNEs will force competitors to make investments in their own facilities and networks.

The CFA study concluded that when incumbents were allowed into the long distance market before local markets were irreversibly open, competition did not take hold; that there was a strong relationship between wholesale costs and UNE prices; and that there was no evidence that reduced UNE availability led to higher investment rates by competitors. Competitive local exchange carriers (CLECs) make investments in those segments where it makes economic sense to do so, the CFA study found.

Thus far, the CFA study's findings and conclusions have not been publicly scrutinized by academics or telecommunications experts. Having previously examined the effects of UNEs in the states, the CEI and NMRC undertook this critique to assess the basis of the CFA study claims. This report presents the views of two telecommunications experts – Solveig Singleton, Senior Policy Analyst for the Competitive Enterprise Institute and Stephen B. Pociask, President of TeleNomic Research, LLC. Each reviews, qualitatively and quantitatively, the CFA study's assertions, claims, and recommendations and provides insightful perspectives on the role that UNEs play in local phone competition, consumer benefits, and network investment.

Solveig Singleton *finds that the CFA study doesn't address telephone company investment after the telecom bubble burst. Instead, it focuses on capital investment after the 96 Telecom Act. She says those investment levels were unsustainable, that regulators should use price controls sparingly, and that basing wholesale prices on a future hypothetical cost model does nothing to finance the building of today's networks.*

"Regulators must recognize that investment follows incentives, and price controls erode incentives," says Ms. Singleton. "The essential problem with TELRIC [is that] the super-efficient network is imaginary and quite subjective. TELRIC price controls and unquestioning unbundling of everything under the sun erode incentives to invest in new wireline networks. The FCC's own data show that CLECs are abandoning their own access lines to piggyback on the old networks."

"For a stark contrast, look at the rates of growth in less-regulated wireless. This is where the real opportunities for investors are and where the real choices for consumers will continue to spread," Ms. Singleton says. Regulators should, keeping in mind how they will transition out of them."

For real competition to occur, Ms. Singleton argues that facilities based competition should be paramount. "If the networks of the future are to be something other than a twisted reflection of legal complexities, competition in building networks is just as important as competition in marketing, pricing, and packaging...Endlessly repackaging the same service offered over the same network will not end monopoly. Real competition happens between real networks."

"The idea behind holding the locals out of long distance was to provide a 'carrot' to tempt them to open their local markets," says Ms. Singleton. To get the "carrot," RBOCs had to open their local markets and were saddled with the "stick" of unbundling, she says. "From a regulatory standpoint, this may have been a necessary transitional measure. But for consumers, it's doubtful that the game was worth the candle." The CFA study, rather oddly, doesn't recognize the tension between consumer interests and regulatory strategy here, she adds.

In any case, the carrot/stick model the CFA study defends is fast becoming outdated, she says. "The long distance market is looking unhealthy as revenues fall. So the longer we wait to let local companies provide long distance, the more likely they will lose interest and find less regulated opportunities."

Ms. Singleton also points out that for the CFA study's argument on TELRIC prices and costs to have any validity at all, the process for measuring costs at the state level should have some kind of integrity. "In practice, wild fluctuations in rates within some states, gross inconsistencies in rates across similar states, and the bizarre technological concepts cooked up in state regulatory proceedings make it unlikely that these costs measures are worth the paper they are printed on. Certainly, investors are not relying on them."

"The CFA study ignores the lessons of the telecom meltdown; sustainable investment requires stable incentives, not regulatory hand-holding of one market segment," Ms. Singleton concludes. ***"It ignores the growth of business competition in local markets from the 1980s, showing that if BOCs do inflate their costs/prices they will be undercut by facilities-based competitors."*** The paper employs a simple-minded definition of competition, ignoring the benefits of competition in building networks and access, she says. Finally, the paper pretends that TELRIC yields an objective measure of costs, as opposed to an artificial construct subject to wild manipulation, she notes.

Ms. Singleton recommends that State regulators should recognize that UNE-P and TELRIC regulations hurt consumers more than they help. ***"It is time to take the next step towards real competition between real networks. UNE-P and TELRIC itself should be phased out, the latter to be replaced first by a more objective measure of costs. Ultimately, both retail and wholesale prices must be deregulated."***

Disputing the CFA study's contention that competition is in trouble, **Stephen Pociask** finds that competition is developing at a robust pace and more regulation is the last thing the industry needs. ***"There are over 153 million wireless subscribers, a number rivaling the total traditional telephone lines provided by the Regional Bell Operating Companies (RBOCs)."*** Competition is also taking shape in the form of tens of million of high-speed connections from cable operators and other broadband providers, he says. ***"These high-speed services permit voice communications, as well as data and video transport services, making them far superior to traditional telephone service."***

Mr. Pociask also points out that the CFA study ignores this competition and focuses on only the market for traditional local voice telephone services. Even given this limited focus, the traditional local telephone market is irreversibly open to competition, he says. ***"This is not, as the CFA would lead one to believe, an ILEC view or an RBOC view, this is the view 48 of 48 state commissions that have independently judged the ILECs to have sufficiently and irreversibly opened their markets to CLECs in terms of interconnection and nondiscriminatory access of the ILECs' facilities."***

Mr. Pociask also disputes the CFA study's three main arguments.

Claim 1. – Mr. Pociask notes that ***the RBOCs have never been allowed to enter an in-region long distance market before that market was fully opened to competitors.*** ***"The Section 271 competitive checklist requires markets to be irreversibly opened first and requires nondiscriminatory access for CLECs before ILECs can enter that long distance market...In all 48 states where Section-271 process could be applied, the ILECs' markets were found to be irreversibly opened."***

He also says there is evidence that ***ILEC entry into the long distance market did increase competition in the local exchange market, <u>after Section 271 approval</u>.*** And in the opposite case, Mr. Pociask finds that there is evidence that ILEC entry into the long distance market did increase competition in that market. ***"Where local telephone companies have been permitted to provide long distance services, the increase in competition has been sufficient to lower consumer prices,"*** he says.

If consumers are benefiting from competition, why does the CFA study argue for more regulation, Mr. Pociask asks. ***"Several studies have shown that the potential benefits from long distance competition exceed the potential benefits of local competition by more than 4 to 1. Oddly, holding back long distance entry, a position that the CFA study appears to favor, harms consumers."*** He concludes there is overwhelming evidence that consumers are saving as a result of the elimination of long distance entry barriers. ***"The CFA report has selectively ignored the studies and facts cited here."***

Claim 2. – ***Mr. Pociask notes the CFA study attempts to prove something different than the ILECs supposedly claim.*** The ILECs' claim that UNE prices do not fully recover their costs, including investment costs. "If, for example, UNE prices only recovered 40% of the ILECs' costs, then the ILEC claim would be true," states Mr. Pociask. "However, if every state set prices this way (recovery of only 40% of costs), then the CFA study response – that there is a strong relationship between wholesale costs and retail prices – would also be true."

Evidence suggests that ***UNE prices are set so low that they represent a corporate subsidy for the CLECs paid for by the ILECs,*** he says. ***"One study calculated that TELRIC costs (the formula used to price network elements) would need to be marked up 3.3 times in order to recover the ILECs' sunk costs and risks."***

"In contrast, regulatory commissions estimate that ILECs can shed only 19 percent of their cost when the ILECs' retail customers are replaced by the ILECs' wholesale services," says Mr. Pociask. This divergence between price and cost leads to an absolute decline in cash flow and earnings for ILECs, he notes. "The CFA study retort for this is that these earnings are based on historically embedded costs, while TELRIC estimates are based on future competitive costs." TELRIC models are full of assumptions that may not reflect real-world realities, such as hurricane damage, network redundancies for security and reliability, and human error, he says. "Economists have criticized TELRIC models and their assumptions for years."

Still, the CFA study believes that UNE prices are reasonable. The CFA study's evidence is also weak, says Mr. Pociask. "They offer data showing that TELRIC costs are roughly aligned to UNE prices. The CFA study shows FCC data on what is supposed to be residential CLEC lines. What the CFA study does not tell the reader is that the FCC does not publish residential CLEC line data separately – it combines residential and small business lines." Accepting that error, the CFA study shows only that TELRIC costs are similar to UNE prices, he notes. "Both price and TELRIC costs can be too low and be correlated. Therefore, the CFA study has not provided any evidence to support its conclusions."

Claim 3. – ***The CFA study finds no relationship between current UNE price and UNE use by CLECs, defying even the laws of supply and demand,*** says Mr. Pociask. "To support this claim, the CFA study pairs and plots, for each state, UNE prices (as a percent of residential retail price) against the percent of total UNE lines in use by CLECs, and not the percent of residential UNE lines in use by CLECs. Similarly, the CFA study pairs and plots, for each state, UNE prices (as a percent of business retail price) against the percent of UNE line use by CLECs, and not the percent of business UNE lines in use by CLECs. Therefore, not one of the seventy-eight data points in the CFA study finds the correct point on both the horizontal and vertical axes." The result is a confusing, meaningless scatter plot that the CFA study uses in finding no relationship between UNE discounting and UNE use by CLECs, he finds.

There is ample evidence that consumers benefit from competition. For this reason, the CFA study should support fair competition and resist efforts (by some) to give an advantage to one competitor over another, he concludes.

Of Languishing Local Loops and Circular Arguments: Critique of the Consumer Federation of America's Telecom 'Crossroads' Study

Solveig Singleton
Senior Policy Analyst
Competitive Enterprise Institute

The controversy over the Federal Communication's Commission's "Triennial Review" of telecommunications regulation has brought a wide range of research offerings. The CFA's study is one of the more recent. It urges states to continue aggressive price controls on wholesale rates (TELRIC) and to perpetuate offerings of the unbundled network platform, the controversial UNE-P. But a careful reading of the study reveals that many of its key arguments are sadly naïve or bizarrely circular.

The states should beware the study's prescriptions. The meltdown of the telecommunications industry is a red flag that past regulatory policies have heavy costs. Unbundling and steep price discounts now bear a weighty burden of proof. It is time to take a new direction towards more competition in facilities and networks.

Describing Investment: The Need for Sustainable Investment and Incentives

One stark oddity of the CFA study is its omission of any discussion of how hard the last couple years' recession hit telecommunications companies. The study does point out that there has been investment in telecom. Indeed, large amounts of money have been invested—and much lost and misdirected. The spate of telecom investment has not proved to be sustainable. As many Wall Street analysts have pointed out, there is serious question as to where the next round of investment funds are going to come from. Both local and long distance revenues continue to fall. TELRIC price controls and unquestioning unbundling of everything under the sun erode incentives to invest in new wireline networks. The FCC's own data show that CLECs are abandoning their own access lines to piggyback on the old networks.

UNE-P, which as many web sites advertise (see, for example, http://a-adt.com/), allows virtually *investment free* entry into telecom offers consumers advantages from price arbitrage and choices in packaging, yes. But these policies are not building the networks of the future. For a stark contrast, look at the rates of growth in less-regulated wireless. This is where the real opportunities for investors are and where the real choices for consumers will continue to spread.

Regulators must recognize that investment follows incentives, and price controls erode incentives. Regulators should use price controls sparingly and with extreme caution, and begin to lay the groundwork for transitioning out of them.

Defining Competition: The Need for Network Competition

If the networks of the future are to be something other than a twisted reflection of legal complexities, competition in building networks is just as important as competition in marketing, pricing, and packaging. The CFA study emphasizes the role the CLECs have played in innovative marketing and cutting prices. But some, like Covad and Allegiance, have also tried to build their own networks. Wireless also offers alternative networks. These competing networks are no more "redundant" than having two grocery stores in the same town; ultimately, this is essential for consumers to see a full range of benefits from competition. Endlessly repackaging the same service offered over the same network will not end monopoly. Real competition happens between real networks.

In the short run, building a competing network is expensive and hard. But it does happen. MCI started as a facilities-based competitor to Ma Bell. In the 1980s, companies like Teleport and Metropolitan Fiber Systems sprang up, building fiber networks to link urban businesses with long distance networks. This network competition sprang up in long distance and business in spite of, not because of, regulation. If competition is slower to come to the residential market, one might note a key difference between residential and business (and long distance) rates. That is, retail rates in residential areas are often held below cost.

So here are two more recommendations for regulators: (1) Don't forget the benefits of competition between networks, both wireline *and* wireless, and (2) Explore the link between competition and *retail* rate flexibility.

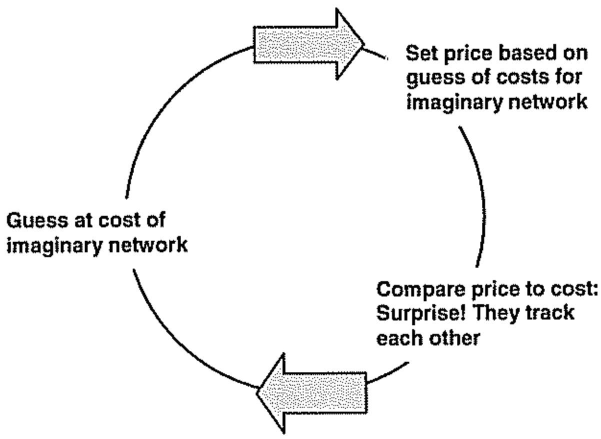
How About a Carrot for Consumers?

Now we come to the issue of local phone company entry into long distance. The idea behind holding the locals out of long distance was to provide a "carrot" to tempt them to open their local markets. To get the "carrot," RBOCs had to open their local markets and were saddled with the "stick" of unbundling. From a regulatory standpoint, this may have been a necessary transitional measure. But for consumers, it's doubtful that the game was worth the candle. Consumers would have benefited enormously from even more long distance competition, whatever the state of local markets. CFA's study, rather oddly, doesn't recognize the tension between consumer interests and regulatory strategy here.

But in any case the carrot/stick model the CFA study defends is fast becoming outdated. The long distance market is looking unhealthy as revenues fall. So the longer we wait to let local companies provide long distance, the more likely they will lose interest and find less regulated opportunities. Remember that telcos wanted to get into cable television, too, and vice versa, but regulators held that window shut far too long. When the window opened, it was too late, and both cable and telcos had one less potent competitor in their traditional markets. Luckily, the telcos and cable are still both interested in less-regulated broadband.

Uses of Imagination in the Economy: CFA on TELRIC Prices and Costs[3]

Suppose you were to give someone a ride to New York for the holidays in your car, and he paid you for gas. But then he only paid you for the amount you would have spent on gas, if you had been traveling along a perfectly efficient, frictionless highway of the future with no traffic. You might well object that the payment was insufficient. TELRIC is a similar economic model—only more problematic; the trip isn't a one-time venture. Likewise, CFA's study offers nice graphs purporting to show that state TELRIC rates follow costs, and, well, so it does—*if, as the study does, you measure costs as the TELRIC regime defines them—as the costs of a hypothetical (that is, imaginary) super-efficient future network, seen through the eyes of state regulators.* A graph of the CFA study's methodology would therefore look something like this:



[3] Some decades ago, Nobel-winning economist F. A. Hayek wrote his famous essay on how prices carry information through markets; the title is usually translated as "Uses of Information in the Economy."

For the CFA study's argument to have any validity at all, the process for measuring costs at the state level should have some kind of integrity. In practice, wild fluctuations in rates within some states, gross inconsistencies in rates across similar states, and the bizarre technological concepts cooked up in state regulatory proceedings make it unlikely that these costs measures are worth the paper they are printed on. Certainly, investors are not relying on them.

Peculiarly, the study also seems to argue that TELRIC prices are inflated, because they are not the bare-bones costs of a bare-voice only network. But is that really what we want a super-efficient future to be? Probably not. The point illustrates, though, the essential problem with TELRIC -- the super-efficient network is imaginary and quite subjective. No one knows what a future super-efficient network will do, what services it will offer, using what equipment and technology, and how it will be priced, much less how much it will cost. And, if we did know, it would have little relevance to the price/cost structure needed to finance the building of *today's* networks.

The CFA study correctly points out the problem with old rate-of-return regulation; giving telcos their historic costs tempts the companies to gold-plate their network, or at least their accounting. But TELRIC errs too far in the opposite direction.

The current thinking is that wholesale price controls in telecom would be improved by paying attention to actual costs. The danger that this would lead to gold-plating today is much lower; wireless competition alone gives local phone companies good reason to stay efficient. Agreeing how costs are to be measured, and tracking them over time, does threaten to get ugly. Ugly, though, is what price controls are. Recognizing this is the first step in moving telecom towards a new consensus on a way out of price controls.

Conclusion

The CFA study ignores the lessons of the telecom meltdown; sustainable investment requires stable incentives, not regulatory hand-holding of one market segment. It ignore the growth of business competition in local markets from the 1980s, showing that if BOCs do inflate their costs/prices they will be undercut by *facilities-based* competitors. The paper employs a simple-minded definition of competition, ignoring the benefits of competition in building networks and access. Finally, the paper pretends that TELRIC yields an objective measure of costs, as opposed to an artificial construct subject to wild manipulation.

State regulators should recognize that UNE-P and TELRIC regulations hurt consumers more than they help. It is time to take the next step towards real competition between real networks. UNE-P and TELRIC itself should be phased out, the latter to be replaced first by a more objective measure of costs. Ultimately, both retail and wholesale prices must be deregulated.

"Competition at the Crossroads:" Assessing the CFA Study's Phone Competition Data and Conclusions

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Overview

A recent study, "Competition at the Crossroads" from the Consumer Federation of American (CFA), draws some conclusions that are contrary to the findings of numerous studies coming out of academia and prominent "think tanks," a well as contrary to views of industry and financial analysts, the Federal Communications Commission (FCC) chairman and others.[4] The CFA study paints a picture that competition has failed in the industry, and the industry will remonopolize and increase consumer prices.[5] This paper analyzes the CFA study and finds the report to be misleading, subjective and contrary to the interests of consumers. From the start, the CFA study takes positions that are not supported by empirical evidence, makes assertions without proper citation, and then misapplies data to support what appear to be predetermined conclusions. Portions of the CFA analysis are simply erroneous.

What is most puzzling about the report is that it squarely commits the CFA study as pro-CLEC (competitive local exchange carrier) and anti-ILEC (incumbent local exchange carrier). That stance is neither pro-competitive nor pro-consumer, since competition requires that public policies not favor one group of competitors over another. It is puzzling why the CFA study advocates the same views as the CLECs, when CLECs have disproportionately shunned residential consumers, opting for more profitable businesses customers. As a group, the CLECs are no special friend of residential consumers. What is even more puzzling is that the CFA study argues that ILEC wholesale prices and costs should be aligned, an argument if applied to retail prices would justify significant increases in residential telephone prices. These puzzling positions should leave consumers wondering whom exactly does the CFA study support? Competition is not at a crossroads, as the CFA study contends, it is simply the study's arguments that have reached a dead end.

Is Competition In Trouble?

Industry competition has become irreversibly opened. While CLECs provide nearly thirty million lines to customers,[6] this is only one aspect of the competition that is underway, much of it occurring in the absence of regulation. Contrary to the CFA study's claims, competition is developing at a robust pace and more regulation is the last thing the industry needs. There are over 153 million wireless subscribers,[7] a number rivaling the total traditional telephone lines provided by the Regional Bell Operating Companies (RBOCs). Competition is also taking shape in the form of tens of million of high-speed connections from cable operators and other broadband providers. These high-speed services permit voice communications, as well as data and video transport services, making them far superior to traditional telephone service. Consumers now have access to voice-over-Internet services that replace traditional circuit-switched traffic. Besides voice-over-Internet services, other Internet-based services are available online, including call waiting, instant messaging, voice mail, IP teleconferencing, and virtual PBX services. These Internet-based services are replacing all traditional phone services, and sometimes free of charge.

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[4] "Competition at the Crossroads: Can Public Utility Commissions Save Local Phone Competition?" the Consumer Federation of America (CFA), Washington, DC, October 7, 2003.
[5] CFA, p. 27.
[6] The CFA predicts this by year's end, see CFA, p. 7.
[7] Wireless subscriber figure from www.CTIA.org on Dec. 4, 2003.

The CFA study ignores this competition and focuses on only the market for traditional local voice telephone services. Even given this limited focus, the traditional local telephone market is irreversibly open to competition. This is not, as the CFA study would lead one to believe, an *ILEC view* or an *RBOC view*, this is the view 48 of 48 state commissions that have independently judged the ILECs to have sufficiently and irreversibly opened their markets to CLECs in terms of interconnection and nondiscriminatory access of the ILECs' facilities.[8] In these 48 cases, not only have the state regulatory commissions agreed, so have the FCC and the Department of Justice (DOJ) that local markets are open and that they do not pose any anticompetitive risks for consumers. However, CFA's study, "Competition at the Crossroads," draws some very different conclusions, calling for a continuance of regulations that, by some accounts, are harming consumers.

The centerpiece of the CFA's study "Competition at the Crossroads" is the attempt to discredit three claims <u>supposedly</u> made by the RBOCs and ILECs.[9] These are:

> **Claim 1**. "The ILECs claim that competition would be stimulated if the Bells are allowed to enter the long distance phone market before new market entrants have real access to the existing telephone network";[10]
>
> **Claim 2.** "UNE prices do not adequately reflect costs, and represent a 'subsidy' to competitors";[11] and
>
> **Claim 3.** "Withdrawing access to Unbundled Network Elements will force the CLECs to make investments in their own facilities and networks."[12]

The CFA study lists supposed RBOC claims, though none of the claims are attributed to any particular person or company. It may be easier for the CFA to discredit a claim that has not been made (or is not widely known) in order to draw predetermined conclusions. This raises some serious questions about the objectivity of the CFA study. The next sections consider and analyze the supposed ILEC claims and the CFA study's responses.

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[8] In this paper, these facilities are referred to as unbundled network elements (UNEs) The recombination of UNEs into a standalone retail service is referred to as UNE-P.

[9] The CFA study sometimes refers to these as claims made by RBOCs (for example see CFA, p. 4 and 18) and sometimes refer to the same claims as those made by ILECs (see CFA, p. 2) There are four RBOCs and 1,337 ILECs It would be hard to prove the ILECs have agreed or taken any position unanimously, much less the claims stated here In fact, some of the claims stated here might also be those made by regulators, academia, consumers, competitive local exchange carriers (CLECs), financial analysts, and others Therefore, the CFA study commits a logical fallacy called a *hasty generalization*. The proof of this fallacy is that the CFA study offers no citation identifying the source of its claims Yet, the CFA study proceeds to debunk them as if they were fact. While this paper will discuss these claims and the CFA study 's rebuttal claims, this paper does not accept these as the positions of any party without proper attribution.

[10] CFA, p. 3.

[11] ibid

[12] ibid.

Supposed ILEC Claim #1:

> **"The ILECs claim that competition would be stimulated if the Bells are allowed to enter the long distance phone market before new market entrants have real access to the existing telephone network."[13]**
>
> **The CFA study finds this supposed ILEC claim to be false and that "when incumbents are allowed into the interLATA long distance market before local markets are irreversibly open, competition does not take hold." [14]**

There are three problems with this CFA study "finding." First, the RBOCs have never been allowed to enter an in-region long distance market before that market was fully opened to competitors. The Section 271 competitive checklist requires markets to be irreversibly opened *first* and requires nondiscriminatory access for CLECs *before* ILECs can enter that long distance market. As previously mentioned, ILECs must first pass a comprehensive checklist administered by the state commissions, and well as meet the approval of the FCC and DOJ. In all 48 states where Section-271 process could be applied, the ILECs' markets were found to be irreversibly opened. Therefore, the CFA study describes an event that has never happened in U.S. telecommunications history. If ILECs have never been granted long distance entry first, then the CFA study cannot observe how these events have stifled competition. Therefore, the study is trying to prove an irrelevant issue and call that issue an *ILEC claim*. It is not clear how consumers benefit from the CFA study's misstatement of these facts.

Second, there is evidence that ILEC entry into the long distance market *did* increase competition in the local exchange market, *after Section 271 approval*. For example, just days before and after the FCC approved Verizon's Section 271 application to provide long distance service in New York, the two biggest long distance carriers announced plans to enter the local market there.[15] Since then, other CLECs have intensified their efforts in New York as well. In fact, in the first six months following Verizon's entry into long distance, 22% of all new CLEC lines added in the U.S. came from CLECs operating in New York. During the same period, the second most active CLEC market in the country was, not surprisingly, Texas -- the second state to remove long distance regulatory barriers. In fact, the FCC concluded, "states with long distance approval show [the] greatest competitive activity."[16] Clearly, long distance competition sparks local competition, which provides additional benefits to consumers.

In fact, econometric evidence confirms that interLATA relief leads to increasing competition in the local telephone service market. An econometric model produced statistically significant evidence estimating that, on average, 291,000 CLEC lines were added in a given state when ILEC long distance entry occurs in that state.[17] This statistical evidence supports the tenet that, once long distance relief was granted, long distance providers, who once benefited from delaying competition by protecting their own markets, were now spurred to compete for local service customers. Thus, eliminating the long distance entry barrier has been an important stimulus for local competition. It is difficult to understand why the CFA study would be opposed to consumers benefiting from competition.

Finally, there is evidence that ILEC entry into the long distance market did increase competition in that market. Where local telephone companies have been permitted to provide long distance services, the increase in competition has been sufficient to lower consumer prices. When Southern New England Telephone Co. (SNET) entered the long

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[13] ibid.
[14] ibid.
[15] FCC approved Verizon's application for entry into the New York long distance market Dec. 21, 1999. For competitive reactions, see "MCI WorldCom to Sell Local Service in New York," January 13, 2000, CLEC-Planet, www.clec-planet.com/news/0001/000113mci.htm; "MCI WorldCom CEO Announces 'All-Distance' Service, Open Access to All Network Services," MCI WorldCom press release, January 12, 2000; and "AT&T Finally 'Enters' Local Market in New York: Clear Evidence of Competition in Local Phone Service," United States Telecom Association press release, December 3, 1999.
[16] See "Federal Communications Commission Releases Latest Data on Local Competition," News Release, FCC, May 21, 2001, p. 1.
[17] "Long-Distance Entry Barriers and Effects on Wisconsin Consumers," TeleNomic Research, Dec. 3, 2001, Appendix A.

distance market in Connecticut in 1994, it cut its rates 18% below AT&T and captured 35% of the market by February 1997.[18] As a result of increased, MCI and AT&T sought to reduce its rates, but only in Connecticut.[19] This demonstrates that entry by a local telephone company into the long distance market can produce lower consumer prices.

A similar result happened when Verizon was approved to provide long distance services in New York. One study of actual residential customer bills showed that when New York customers switched to Verizon, they saved approximately 31.9% on their long distance phone bills.[20] Two other studies concluded that New York consumers have benefited from the increase in competition resulting from Verizon's entry into the market.[21] A survey conducted by a consumer group concluded that SBC and Verizon customers paid less than what "big three" customers paid for long distance services, including basic rates, directory assistance, and calling card rates.[22] RBOC entry into Florida, Illinois, Georgia, and Pennsylvania long distance markets was predicted to yield $200 million dollars of savings to residential consumers in just the first year of competition, according to another study.[23] And another study predicted a 47% price reduction if RBOCs were permitted to provide long-distance services in California.[24]

If consumers are benefiting from competition, why does the CFA study argue for more regulation? Several studies have shown that the potential benefits from long distance competition exceed the potential benefits of local competition by more than 4 to 1.[25] Oddly, holding back long distance entry, a position that the CFA study appears to favor, harms consumers more than it helps them. This position – one that harms consumers - is a puzzling position for the CFA study to advance.

If the CFA study finds that competitors will not respond to market entry, then it must believe that competition does not work and that consumers will not benefit from competition. **Figure 1** (below) shows the coincident timing of Section 271 relief (allowing the RBOCs to enter the long distance market) and the timing of AT&T's offering to give its customers free long distance minutes. The table shows that AT&T is aggressive in its attempts to retain and attract long distance customers in those states where RBOC entry occurs. What AT&T is doing is a positive step for competition and evidence that consumers save when competition is heightened.

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[18] Peter Huber, "Local Exchange Competition Under the 1996 Telecom Act: Red-lining the Local Residential Customer," November 4, 1997, p. vi.
[19] Ibid
[20] Stephen B. Pociask, "Millions Saved by the Bell," Joel Popkin and Co., Washington, DC, August 2000.
[21] See "Telephone Competition Rings Up Big Savings for New York Consumers," News Release, Telecommunications Research and Action Center (TRAC), Washington, DC, Sept. 6, 2000; and "TRAC Estimates New York Consumers Save Up To $700 Million A Year On Local and Long Distance Calling," News Release, TRAC, Washington, DC, May 8, 2001.
[22] *Consumer Action's Interstate Long Distance Rates Survey 2001*, Consumer Action, San Francisco, CA, Fall 2001. A summary can be found at www.consumer-action.org
[23] "Projected Residential Consumer Savings," TRAC, Washington, DC, September 6, 2001.
[24] Professor MacAvoy is cited as the source of this estimate in "Economic Effects of SBC's entry into the Long-Distance Market," Texas Perspectives, Inc. (TXP), Austin, Texas, pp. 5-6.
[25] Price reduction and demand stimulation produce high consumer welfare gains from increasing long distance entry, compared to local entry. For three studies on this, see Deregulation and Consolidation of the Information Transport Sector: A Quantification of Economic Benefits to Consumers," Joel Popkin and Company, Washington, DC, September 29, 1999; Economic Impact of Deregulating U.S. Communications Industries, WEFA, Feb. 1995; and "Competition and Consumer Benefits: A Quantitative Assessment of the In-region BellSouth Long-Distance Market, TeleNomic Research, May 29, 2001, p. 17.

Figure 1: A Comparison of AT&T Free 30-Minute Offers and RBOC 271-Approvals

State	AT&T News Releases	RBOC 271 Approvals
Illinois	October 15, 2003	October 15, 2003
Indiana	October 15, 2003	October 15, 2003
Ohio	October 15, 2003	October 15, 2003
Wisconsin	October 15, 2003	October 15, 2003
Minnesota	June 26, 2003	June 26, 2003
Michigan	April 15, 2003	April 16, 2003
Nevada	April 15 2003	April 14 2003
West Virginia	March 19, 2003	March 19, 2003
Maryland	March 19, 2003	March 19, 2003
Washington, D.C.	March 19, 2003	March 19, 2003
Florida	December 11, 2002	December 19, 2002
Tennessee	December 11, 2002	December 19, 2002
Colorado	December 2, 2002	December 23, 2002
Idaho	December 2, 2002	December 23, 2002
Iowa	December 2, 2002	December 23, 2002
Montana	December 2, 2002	December 23, 2002
Nebraska	December 2, 2002	December 23, 2002
North Dakota	December 2, 2002	December 23, 2002
Utah	December 2, 2002	December 23, 2002
Washington	December 2, 2002	December 23, 2002
Wyoming	December 2, 2002	December 23, 2002
Virginia	October 30, 2002	October 30, 2002
New Hampshire	September 25, 2002	September 25, 2002
Delaware	September 25, 2002	September 25, 2002
Alabama	September 25, 2002	September 25, 2002
Kentucky	September 25, 2002	September 18, 2002
Mississippi	September 25, 2002	September 18, 2002
North Carolina	September 25, 2002	September 18, 2002
South Carolina	September 25, 2002	September 18, 2002
Maine	June 18, 2002	June 19, 2002
New Jersey	June 3, 2002	June 24, 2002
Vermont	April 15, 2002	April 17, 2002
Rhode Island	February 19, 2002	February 24, 2002
Arkansas	October 22, 2001	November 16, 2001
Missouri	October 22, 2001	November 16, 2001
Pennsylvania	August 14, 2001	September 19, 2001
Massachusetts	May 14, 2001	May 16, 2001

Sources: FCC and AT&T News Releases

In summary, there is overwhelming evidence that consumers are saving as a result of the elimination of long distance entry barriers. The CFA study has selectively ignored the studies and facts cited here. Moreover, the CFA study has picked a supposed ILEC claim that has not been attributed to any ILEC. Furthermore, the CFA study argues that local competition doesn't work when the RBOCs enter the long distance market first. However, the '96 Act forbids this from ever occurring, and instead, the Act requires that local markets be deemed irreversibly opened to competition before long distance relief is granted. In other words, the CFA study is refuting an event that will never occur. Based on extensive evidence, long distance entry has created huge benefits for consumers.

Supposed ILEC Claim #2:

> **"UNE prices do not adequately reflect costs, and represent a "subsidy" to competitors."[26]**
>
> **The CFA study finds that there is a strong relationship between wholesale costs and retail prices.[27]**

Once again, the CFA study is attempting to prove something different than the ILECs supposedly claim. First, the ILECs claim that UNE prices do not fully recover the ILECs' costs, including investment costs. If, for example, UNE prices only recovered 40% of the ILECs' costs, then the ILEC claim would be true. However, if every state set prices this way (recovery of only 40% of costs), then the CFA study response – that there is a strong relationship between wholesale costs and retail prices – would also be true. The presence of a relationship between prices and costs does not disprove this supposed ILEC claim. After all, if costs are measured improperly, then setting prices based on these costs will result in the improper measurement of price. This means that both the cost and the price levels are wrong, but they still may be correlated.

How are UNE costs measured and UNE prices set? In setting the prices for UNEs, regulatory commissions almost always rely on hypothetical bottom-up cost models called TELRIC models.[28] The models typically exclude some overhead costs, ignore regulatory costs, overlook actual and prudent investments, miss the recovery of embedded costs, and undervalue the risk of plant obsolescence. Results from these models systematically underestimate wholesale costs, which justify setting lower UNE prices – prices so low that they do not permit the full recovery of the actual costs of deploying and operating the telecommunications network. Regulators have also allowed CLECs to recombine UNEs into a UNE-P service, effectively replicating the resale service called for by the Act, but at half the wholesale price called for by the Act. These two things - reliance on hypothetical cost models and UNE-P- have resulted in wholesale prices that many believe do not fully compensate the ILECs for their costs, including investments.

Evidence suggests that UNE prices are set so low that they represent a corporate subsidy for the CLECs paid for by the ILECs. One study calculated that TELRIC costs (the formula used to price network elements) would need to be marked up 3.3 times in order to recover the ILECs' sunk costs and risks.[29] Another estimated that it would take 20 years of productivity-based price reductions to reach the one-time effect of an immediate shift to these artificially low UNE prices.[30] Four other studies demonstrated that UNE prices were so low that ILECs could not survive solely as

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[26] CFA, p.3
[27] ibid.
[28] TELRIC stands for total element long-run incremental cost. The term *hypothetical* refers to the fact that many of these models assume the ILECs operate the most efficient networks possible, one of several assumptions that cause these models to estimate hypothetical network costs below actual costs.
[29] Jerry Hausman, "Valuing the Effect of Regulation on New Services in Telecommunications," *Brookings Papers on Economic Activity: Microeconomics*, Brookings Institute, Washington, D.C., 1997, pp. 1-54.
[30] Alfred Kahn, Timothy Tardiff, and Dennis Weisman, "The Telecommunications Act at Three Years: An Economic Evaluation of Its Implementation by the Federal Communications Commission," *Information Economics and Policy*, vol. 11, 1999, pp. 330-32

wholesale companies.[31] Another analysis compared UNE revenues to retail end-user revenues and concluded that UNEs give the ILECs as little as 39 cents on every retail dollar they lose.[32] Similarly, studies by the National Regulatory Research Institute estimated that UNE revenues recover 50 percent of retail revenues.[33] AT&T, which has its own CLEC operations, has publicly estimated the recovery to be approximately 55 percent.[34]

In contrast, regulatory commissions estimate that ILECs can shed only 19 percent of their cost when the ILECs' retail customers are replaced by the ILECs' wholesale services.[35] Therefore, when ILECs lose a retail customer to a wholesale customer, they lose more than half of their revenues but shed only 19 percent of the costs. FCC Chairman Michael Powell has noted that UNE-P is priced lower than the law permits:

> "UNE-P is nothing more than a complete use of the incumbent's network, priced by element. This results in a substantially lower price than the statute allows for resale."[36]

This divergence between price and cost leads to an absolute decline in cash flow and earnings for ILECs. However, the CFA study retort for this is that these earnings are based on historically embedded costs, while TELRIC estimates are based on future competitive costs. Of course, the reality is that TELRIC models are hypothetical models, models that assume a network configuration that may not exist. TELRIC models assume the most efficient investment possible, not necessarily the investment currently in use by the ILECs. If CLECs can lease UNEs at the cost of the most efficient network possible, then CLECs are paying less than the ILECs are paying for using the exact same network. This provides CLECs, who need not invest in plant to serve the market, with a network cost advantage financed by the ILECs. Call that a subsidy or not, but clearly it is an advantage given to CLECs at the ILECs' expense.

TELRIC models are full of assumptions that may not reflect real-world realities, such as hurricane damage, network redundancies for security and reliability, and human error. Economists have criticized TELRIC models and their assumptions for years.[37] A recent FCC white paper agrees that TELRIC pricing may lead to significant under-recovery of the ILECs' investment. In a working paper from the FCC's Office of Strategic Planning and Policy Analysis, Mandy and Sharkey find that TELRIC prices will not recover costs as long as the price for future investments decline.[38] The paper shows that raising the TELRIC price by a factor can eventually set prices to where they recover costs. Separately, the FCC Triennial Review Order (TRO) recommends changes to the TELRIC model, changes that would raise UNE prices as well.

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[31] Stephen Pociask, "Competition at Bargain Prices," published as "Two Degrees of Structural Separation," *America's Network*, Vol. 102, No. 24, Dec. 15, 1998, pp. 38-42; Stephen Pociask "Structural Separation: Consequences for Michigan Consumers," TeleNomic Research, May 9, 2001; Stephen Pociask, "Structural Separation of BellSouth Telecommunications and Its Effects on Florida Consumers," TeleNomic Research, July 31, 2001; and Stephen Pociask, "Addition by Division: How Dividing-up Ameritech Indiana Would Add Costs and Harm Consumers," TeleNomic Research, May 14, 2001.

[32] Jeffrey A. Eisenach and Thomas M. Lenard, "Telecom Deregulation and the Economy: The Impact of UNE-P on Jobs, Investment and Growth," Progress & Freedom Foundation, Progress on Point, Release 10.3, January 2003, p. 10.

[33] See Billy Jack Gregg, "A Survey of Unbundled Network Element Prices in the United States," National Regulatory Research Institute, updated July 1, 2002, Appendix. The author's most recent study (using January 2003 UNE prices) shows that UNE prices have continued to fall, widening the gap between wholesale and retail prices.

[34] "Competition in an All Distance World," AT&T Presentation to NARUC, Nov. 11, 2002, p. 3.

[35] This is sometimes referred to as the percent avoided cost, or the percentage of costs that ILECs avoid when they lose one retail line and gain one wholesale line.

[36] Separate Statement of Chairman Michael K. Powell, regarding Triennial Review Order, Feb. 20, 2003.

[37] For example, see Alfred Kahn, *Letting Go: Deregulating the Process of Deregulation*, Michigan State University Public Utilities Papers, 1998.

[38] David Mandy and William Sharkey, "Dynamic Pricing and Investment from Static Proxy Models" FCC, working paper, Sept. 2003.

Financial analysts have access to the results of these hypothetical cost models and choose not to use them. For the most part, the financial community finds the ILECs' UNE and UNE-P services to be generally unprofitable, making the ILECs a less desirable investment and a greater financial risk for investors. The financial calamity facing ILECs has been demonstrated in reports issued by the investment community[39] and has resulted in downgrades for the ILECs.[40] This finding was expressed by one analyst at Morgan Stanley, which suggested that UNE-P leaves the ILECs with virtually all of their costs but only 60% of their original revenue.[41] Commerce Capital Markets made a similar finding, that UNEs are priced far below the total operating cost of the RBOCs[42] and that UNE-P prices are even less likely to cover costs.[43] Raymond James Financial found that ILECs would be unable to reduce costs to meet revenue losses from UNE-P sales to CLECs[44]

Still, the CFA study finds that UNE prices are reasonable,[45] but a number of studies have found otherwise. A study showed that UNE-P places $38 billion at risk for the ILECs, even if CLECs exclusively use the ILECs' networks.[46] After deducting what costs ILECs should avoid by not being the retailer of the service, ILECs still could lose $23 billion because UNE prices are set below avoided-costs.[47]

Furthermore, the CFA study's evidence is weak. They offer data showing that TELRIC costs are roughly aligned to UNE prices.[48] The CFA study shows FCC data on what is supposed to be residential CLEC lines.[49] What the CFA study does not tell the reader is that the FCC does not publish residential CLEC line data separately – it combines residential and small business lines.[50] Accepting that error, the CFA study shows only that TELRIC costs are similar to UNE prices. However, as stated earlier, if TELRIC costs are too low, then UNE prices are also too low. Both price and TELRIC costs can be too low and be correlated. Therefore, the CFA study has not provided any evidence to support its conclusions.

Interestingly, the CFA study's argument that prices and costs should be aligned is exactly the argument that can be used to increase residential telephone rates. Today, business customer rates are set higher in order to keep residential customer rates lower. This implicit subsidy is used to maintain universal telephone service. CLECs, particularly with the help of artificially low priced UNEs, cream-skim and arbitrage these higher business rates, which undermines the implicit support for universal service and puts residential customers at the risk of higher prices. Aligning prices to costs will reduce business rates, and raise residential customer rates. While the ILECs are the residential consumers' provider of last resort, many CLECs have shunned the residential market. As a result, the CFA study's stance may not be the best one for promoting consumer welfare.

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[39] For example, see "How Much Pain from UNE-P? Analysis of UNE-P Economics for the Bells," UBS Warburg, Global Equity Research, United States, Fixed Line Communications, August 20, 2002.
[40] Robert A. Saunders, "UNE-P Regulating Toward the End of the Industry?" *Telephony Online*, Sept. 13, 2002.
[41] M. Crossman, "No Growth Expected for Bells in 2003," Industry Update, J.P. Morgan Securities, July 12, 2002. The term *Bells* refers to the ILECs that were spun off of AT&T at divestiture (also referred to as *RBOCs* or *Regional Bell Operating Companies*).
[42] Anna-Maria Kovacs, "Status of 271 and UNE Platform in the Regional Bells' Territories," Commerce Capital Markets, May 1, 2002.
[43] Anna-Maria Kovacs, Update, Commerce Capital Markets, Nov. 8, 2002.
[44] F.G. Louthan, IV, "UNE-P: Unlocking the Impact to the RBOCs," Raymond James and Associates, October 21, 2002
[45] CFA, p. 1.
[46] The Effects of Bargain Wholesale Prices on Local Telephone Competition: Does Helping Competitors Help Consumers?" TeleNomic Research, released by the New Millennium Research Council and the Competitive Enterprise Institute, Washington, DC, June 2003.
[47] State commission set both UNE-P prices and avoided cost discount prices for resale services. Using TELRIC versus avoided cost results in different discounts off retail price for the same wholesale service.
[48] CFA, Exhibit 3, p. 10.
[49] CFA, Exhibits 4 and 5, pp. 11 and 14, respectively.
[50] Actually, the FCC includes business lines with less than four lines on the telephone account.

Supposed ILEC Claim #3:

> **"Withdrawing access to Unbundled Network Elements will force the CLECs to make investments in their own facilities and networks."[51]**
>
> **The CFA study responds to this by concluding that there is no evidence that investment will increase when the availability of UNEs is reduced.[52]**

Defying even the laws of supply and demand, the CFA study finds no relationship between current UNE price and UNE use by CLECs.[53] To support this claim, the CFA study pairs and plots, for each state, UNE prices (as a percent of residential retail price) against the percent of total UNE lines in use by CLECs, and not the percent of residential UNE lines in use by CLECs.[54] Similarly, the CFA study pairs and plots, for each state, UNE prices (as a percent of business retail price) against the percent of UNE line use by CLECs, and not the percent of business UNE lines in use by CLECs. Therefore, not one of the seventy-eight data points in the CFA study finds the correct point on both the horizontal and vertical axes. The result is a confusing, meaningless scatter plot that the CFA study uses in finding no relationship between UNE discounting and UNE use by CLECs. However, the chart is just plotted incorrectly.

In reality, the relationship between UNE price and use is statistically significant and can be easily demonstrated using the same data cited in the CFA study. Because state commissions are frequently revising UNE prices, it is not proper to compare a snapshot of state prices to seven years of UNE use. Instead, a snapshot of state price should only be compared with a snapshot change in UNE demand by CLECs. Using the same sources of data that the CFA study used,[55] **Appendix 1** of this report shows the number of UNE lines added for the states where data is available. By converting this into the percent UNE lines added (representing UNE line growth over the base of all lines) during last year and regressing the data against a snapshot UNE-P prices (also shown in **Appendix 2** of this report), the relationship is statistically significant with at T-statistic of 3.22, exceeding the critical 99% confidence level. In addition, regressing the percentage of UNE lines added to UNE loop prices produces a T-statistic of 3.34. Furthermore, regressing the number of UNE lines added as a function of total state lines and UNE price, produces T-statistics of 3.39 and 3.61, respectively, and an explanatory power exceeding 70%. In other words, UNE prices and UNE use by CLECs are strongly correlated, a correlation that statistically could not have occurred by chance. Therefore, the CFA study's analysis is incorrect. Besides, if economists believe that the demand for wholesale services is downward sloping, then the CFA logic is also intuitively flawed. After all, if UNE use were insensitive to price, then CLECs would not reduce UNE use if prices were doubled.

Some have argued that low UNE prices have hampered industry investment, encouraged CLECs to rent rather then build, and discouraged ILECs to slow investments where they cannot recover costs. As previously mentioned, there is overwhelming data and belief that UNEs are priced below cost. Because CLECs can lease UNEs below cost, CLECs need not take the risk of building their own alternative networks. The ILECs, unable to recover their investment, are also reluctant to invest. **Figure 2** (below) shows that UNE prices are so low that CLECs are now abandoning their own lines for leased lines. It is inconceivable that the CFA study can find this abandonment as a good thing for consumers.

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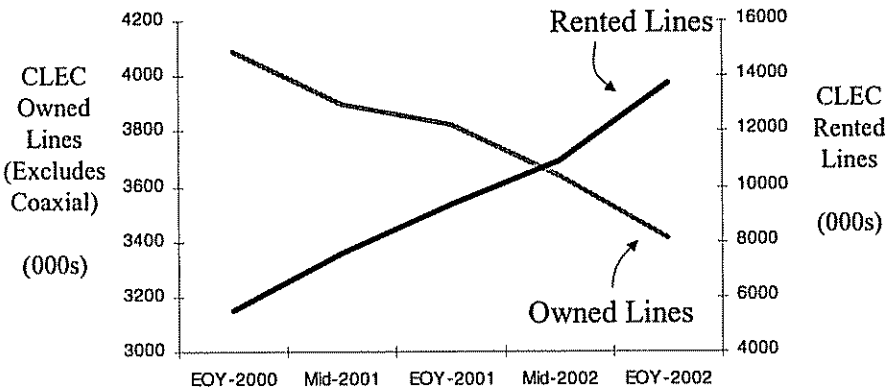
[51] CFA, p. 3.
[52] CFA, p. 3.
[53] CFA. P. 20.
[54] CFA, Exhibit 8, p. 21.
[55] This paper examines that change in UNE use based on the change from December 2001 to December 2002. It uses UNE-P prices effective in July 2002, roughly the mid-point of the FCC data. See "Local Telephone Competition: Status as of December 31, 2002," FCC, June 2003 and earlier FCC local competition reports. Also see Bill Jack Gregg, "A survey of Unbundled Network Element Prices in the United States," National Regulatory Research Institute, updated July 1, 2002.

Figure 2: CLECs Can Rent Telephone Lines for 30% Less than It Costs To Own and Operate Them



As UNE Prices Fall, CLECs Have Begun Abandoning their Own Networks, Much to the Harm of Consumers and the Economy

Source: Stephen Pociask,"Telescam," Pacific Research Institute, 2003.

Regardless of whether limiting the availability of UNEs would lead to a significant increase in investment, low UNE prices are not good for consumers. Low UNE prices create renters, not competitors, as well as destroying the incentives to own and build. Low UNE prices support inefficient competitors and encourage competitors to use the same network they have always had available to them. Furthermore, low UNE prices impede the development of alternative networks, meaning that low UNE rates will lead to impairment and perpetuate regulation. These reasons might be good for advocates involved in the regulatory tussle, but all of these reasons are bad for consumers and lead to a misallocation of industry resources.

How can the CFA study support corporate subsidies that have no apparent benefit to consumers? One study showed that low UNE prices cost consumers ten times more than they benefit, and, based on the consumer price index for local telephone services, there is no evidence that consumer prices have declined as a result of theses subsidies to corporations.[56] The CFA study's pro-business stance is a mystery.

From this report, the CFA study concludes that remonopolization may occur.[57] Yet, the paper errs when it states "the Department of Justice defines a market with 6 or more equal-sized competitors as moderately concentrated."[58] This is not the DOJ definition.[59] The problem with the CFA study's arguments is that they ignore the many intermodal competitors that now compete in the market, including wireless and high-speed cable modem service competitors. The market is less concentrated now than it has ever been, and the CFA study's arguments are reaching a dead end.

[56] "The Effects of Bargain Wholesale Prices on Local Telephone Competition: Does Helping Competitors Help Consumers?" TeleNomic Research, released by the New Millennium Research Council and the Competitive Enterprise Institute, Washington, DC, June 2003.
[57] CFA, p. 27.
[58] CFA, p 13
[59] For example 11 equal-sized firms would be considered an unconcentrated industry using a Herfindal-Hirshman Index of concentration. See *Horizontal Merger Guidelines*, U S. Department of Justice and Federal Trade Commission.

Summary

There is ample evidence that consumers benefit from competition. For this reason, the CFA study should support fair competition and resist attempts (by some) to give advantage to one competitor over another competitor. However, the CFA study does not take a balanced approach to the findings it presents. Instead, the CFA study is fraught with problems. The study makes errors, misstates facts, plots erroneous data, attempts to discredit claims made by no particular party, and concludes findings on market events that have never occurred. Because it appears to make predetermined conclusions, the CFA study lacks objectivity.

APPENDIX 1

FCC Data on Local Competition				
State	12/2002 Total Lines	12/2001 UNE	12/2002 UNE	UNEs Added
Arizona	3,278,290	67,682	77,745	10,063
California	24,174,586	603,103	1,281,292	678,189
Colorado	3,124,180	148,131	153,730	5,599
Connecticut	2,499,908	7,391	42,112	34,721
D.C.	992,094	9,692	47,269	37,577
Florida	11,901,261	376,833	848,818	471,985
Georgia	5,204,294	326,391	454,910	128,519
Illinois	8,596,609	567,893	933,020	365,127
Indiana	3,744,405	78,717	158,277	79,560
Iowa	1,530,809	139,943	144,002	4,059
Kansas	1,494,363	103,017	190,189	87,172
Louisiana	2,542,272	42,008	93,663	51,655
Maryland	3,787,931	57,658	173,784	116,126
Massachusetts	4,501,471	116,675	161,145	44,470
Michigan	6,536,688	627,703	1,153,763	526,060
Minnesota	3,280,929	223,422	307,615	84,193
Missouri	3,482,767	109,806	203,593	93,787
Nebraska	1,006,092	29,023	32,582	3,559
New Hampshire	849,546	14,433	45,913	31,480
New Jersey	6,565,355	93,334	410,070	316,736
New York	12,836,349	2,083,800	2,152,342	68,542
North Carolina	5,230,238	118,446	190,791	72,345
Ohio	7,057,674	121,224	468,521	347,297
Oklahoma	1,934,157	30,217	72,228	42,011
Oregon	2,138,863	75,298	99,339	24,041
Pennsylvania	8,573,098	515,883	612,095	96,212
Rhode Island	671,345	25,581	44,184	18,603
Tennessee	3,474,219	127,542	153,049	25,507
Texas	12,949,056	1,440,485	1,467,770	27,285
Utah	1,269,413	47,570	49,498	1,928
Virginia	4,902,153	271,992	288,416	16,424
Washington	3,960,744	94,453	118,203	23,750
Wisconsin	3,541,341	208,669	351,822	143,153

Source: FCC Local Competition Reports as of December 2001 and December 2002. Only states with insufficient data were omitted from this analysis.

APPENDIX 2

UNE Prices and UNEs Added 2001 to 2002			
State	% UNEs Added	UNE-P Price	Loop Price
Arizona	0.31%	$26.39	$21.98
California	2.81%	$11.58	$9.93
Colorado	0.18%	$19.71	$15.85
Connecticut	1.39%	$22.95	$12.49
D.C.	3.79%	$15.36	$10.81
Florida	3.97%	$17.98	$15.81
Georgia	2.47%	$19.99	$16.51
Illinois	4.25%	$14.82	$9.81
Indiana	2.12%	$16.98	$8.20
Iowa	0.27%	$18.31	$16.47
Kansas	5.83%	$17.49	$14.04
Louisiana	2.03%	$21.96	$17.31
Maryland	3.07%	$20.20	$14.50
Massachusetts	0.99%	$20.28	$14.98
Michigan	8.05%	$13.87	$10.15
Minnesota	2.57%	$20.76	$17.87
Missouri	2.69%	$19.49	$15.19
Nebraska	0.35%	$20.67	$17.51
New Hampshire	3.71%	$19.23	$16.21
New Jersey	4.82%	$12.89	$9.52
New York	0.53%	$15.19	$11.49
North Carolina	1.38%	$19.77	$15.88
Ohio	4.92%	$14.87	$7.01
Oklahoma	2.17%	$19.95	$14.84
Oregon	1.12%	$17.59	$15.00
Pennsylvania	1.12%	$18.19	$13.81
Rhode Island	2.77%	$17.07	$13.93
Tennessee	0.73%	$17.61	$14.92
Texas	0.21%	$19.17	$14.15
Utah	0.15%	$19.69	$16.13
Virginia	0.34%	$18.00	$13.60
Washington	0.60%	$17.10	$14.56
Wisconsin	4.04%	$18.06	$10.90

Source of prices: Billy Jack Gregg, "A Survey of Unbundled Network Element Prices in the United States," National Regulatory Research Institute, updated July 2002. This survey was selected because its time period reflects the midpoint of the time period used to calculate the change in UNE demand.

METRO PRICING FLEXIBILITY PLAN FOR BELLSOUTH TELECOMMUNICATIONS, INC. – ALABAMA OPERATIONS

1. APPLICABILITY OF THE PLAN

The Metro Pricing Flexibility Plan ("the Plan") for BellSouth Telecommunications, Inc. – Alabama Operations ("BellSouth") will apply to all telecommunications services offered by BellSouth and regulated by the Alabama Public Service Commission (hereinafter referred to as "the Commission") as specified herein.[1] The Plan and its terms and conditions shall not be construed to confer any regulatory authority not existing on the effective date of the Plan on the Commission for unregulated products or services offered by BellSouth or any of its affiliates.

2. DEFINITIONS

A. "Bundled Services" are packages of regulated services or regulated services and unregulated services offered by BellSouth at one price.

B. "Contract Service Arrangement" ("CSA") is an arrangement wherein BellSouth provides services pursuant to a contract between BellSouth and customers in Tier I MSAs where competitive alternatives are known to exist and in Tier II MSAs and Non-MSAs in response to a competitive alternative or other unique circumstances. Such arrangements include situations in which the services are not otherwise available through BellSouth's tariffs, as well as situations in which the services are available through BellSouth's tariffs, but BellSouth offers those services at prices other than those specified in BellSouth's tariffs.

C. "Customer Value Program" is the offering of volume and/or term discounts by BellSouth to eligible customers in BellSouth's service area. Customers subscribing to such programs will receive ongoing benefits for a duration that may exceed ninety (90) calendar days.

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[1] With its May 18, 2002 approval of BellSouth's Section 271 Application, the Commission found that BellSouth had satisfied its obligations under Section 271(c)(1)(A), as well as the requirements of the "Competitive Checklist" under Section 271(c)(2)(B)(i)-(xiv). *See* Docket No. 25835, *Order* Dated July 11, 2002. In other words, the Commission found that BellSouth had fully opened its local markets to competition. Approval of this Plan by the Commission is an acknowledgement that product and pricing flexibility are appropriate in competitive markets.

D. "Effective Date" is the proposed date on which a new tariff or tariff revision is considered effective. The Effective Date is based on a specified number of calendar days following, but excluding, the File Date.

E. "Eligibility Criteria" are the factors used to determine the customers and/or potential customers who would qualify for a Promotion, Customer Value Program, Marketing/Technical Trial, or Bundled Service: i.e., current services or services a customer must subscribe to, monthly spend, service or usage volume, term commitment, geographic location, such as wire center, and/or any other identifiable characteristic.

F. "File Date" is the official date recorded by the office of the Director of the Commission's Administrative Division (Commission Secretary) for any proposed tariff or tariff revision submitted by a telecommunications provider and accepted by the Commission. The File Date is considered administrative in nature.

G. "Interconnection Services" include Switched Access Services, Special Access Services, and Local Access Services and are defined as follows:

i) "Switched Access Services" allow toll providers to interconnect to BellSouth's network in order to originate or terminate switched toll calls.

ii) "Special Access Services" are services providing an analog or digital transmission path that is not switched by a BellSouth end office to directly connect an interexchange carrier's ("IXC's") terminal location and an end user's premises, two IXC terminal locations, an IXC terminal location and a hub, or two end user premises.

iii) "Local Access Services" allow competitive local exchange carriers ("CLECs") or other providers of local exchange services to complete local calls via BellSouth's network pursuant to the Telecommunications Act of 1996 ("the Act") through the interconnection of a CLEC's or other provider's network to BellSouth's network, through the resale by a CLEC of BellSouth's regulated retail services, or through the purchase by the CLEC of unbundled network elements ("UNEs") offered by BellSouth.

H. "Long Run Incremental Cost" ("LRIC") is the cost BellSouth would incur (save) if it were to increase (decrease) the level of production of an existing or new service or group of services. LRIC consists of costs associated with adjusting future production capacity that are causally related to the services being studied. LRIC reflects forward-looking technology and operational methods.

I. "Marketing/Technical Trial" is the offering of a telecommunications service, combination of telecommunications services, or a telecommunications service or combination of telecommunications services in conjunction with a non-regulated service and/or non-telecommunications service by BellSouth to eligible customers on a trial basis in BellSouth's service area for technical and/or marketing purposes. Such trials shall be for the purpose of evaluating, in an operating environment, the performance and pricing of the specific service or services in conjunction with other marketing and environmental factors that can influence customer demand.

J. "Metropolitan Statistical Area" ("MSA") is an area, as defined by the Office of Management and Budget, with a large population nucleus that together with adjacent communities, has a high degree of social and economic integration.

K. "New Service" is a regulated function, feature, capability, or any combination thereof, which is not offered by BellSouth as of the effective date of this Plan.

L. "Promotion" is the offering of a telecommunications service, combination of telecommunications services, or a telecommunications service or combination of telecommunications services in conjunction with a non-regulated service and/or non-telecommunications service by BellSouth to eligible customers in BellSouth's service area. Customers subscribing to promotional offerings receive a one-time or short-term benefit that shall not exceed ninety (90) calendar days.

M. "Retail Telecommunications Services" are the telecommunications services, other than Interconnection Services, which are offered by BellSouth and regulated by the Commission.

N. "Telecommunications Service" is the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available to the public, regardless of the facilities used.

3. GEOGRAPHIC AREAS

For purposes of the Plan, BellSouth's service territory shall be divided into Metropolitan Statistical Areas ("MSAs") and Non-MSA Areas. Additionally, on the effective date of the Plan, the following MSAs shall be designated as Tier I MSAs: Birmingham-Hoover, Mobile, Montgomery, and Huntsville. The remaining MSAs, Anniston, Auburn/Opelika, Columbus (Georgia), Decatur, Florence, Gadsden, Pensacola (Florida), and Tuscaloosa, shall be designated as Tier II MSAs. The Non-MSA areas of the State shall be grouped together for regulatory purposes.[2] (See Attachment A for the classification of BellSouth's wire centers by area.)

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2 For multi-location customers with locations in Tier I MSAs and locations in Tier II MSAs and/or Non-MSA areas, all of the customer's locations will be treated as Tier I locations.

4. RECLASSIFICATION OF MSAs AND/OR WIRE CENTERS

BellSouth may file a request to reclassify a Tier II MSA to a Tier I MSA at any time after the effective date of this Plan. In addition, BellSouth may file a request to reclassify a specific wire center in a Tier II MSA or a Non-MSA area to the Tier I MSA category.

For either reclassification effort, BellSouth shall file supporting documentation demonstrating that the Tier II MSA or wire center in a Tier II MSA or Non-MSA area is sufficiently competitive to qualify for the pricing flexibility afforded to Tier I MSAs. Factors upon which BellSouth may base its reclassification request may include, but are not limited to, collocation arrangements, residential and/or business competitive market share, alternative sources of switching, alternative sources of transport, intra-modal and/or inter-modal competitors, etc. The Commission will have ninety (90) calendar days from the date of filing of the reclassification request in which to approve, modify, or deny the request.

A third party, by timely petition to the Commission within the 90-day period, may request that the reclassification proposed by BellSouth be modified or denied. The 90-day period, however, shall not be extended as a result of third-party petitions.

5. SERVICE CATEGORIES

Each telecommunications service offered by BellSouth and regulated by the Commission shall be assigned to one of two (2) categories: (1) Retail; and (2) Interconnection Services. (See Attachment B for the classification of services by category as of the effective date of this Plan.)

6. TARIFFS

BellSouth shall file tariffs for all telecommunications services offered by BellSouth and regulated by the Commission, except as specifically exempted herein. Tariffs shall be filed for any proposed change to terms, conditions, and/or prices.

Tariffs shall become effective on the date proposed by BellSouth as outlined by this Plan. The Commission retains the authority to investigate a tariff on its own motion or by complaint of another party for violations of the rules and regulations of this Plan or violations of Title 37 of the Alabama Code. Any such motion or complaint shall enumerate the rules and regulations of the Plan and/or Title 37 that have been violated. If the Commission initiates an investigation of a tariff on its own motion or by complaint of another party, the tariff shall remain in effect pending completion of the investigation and hearing. In lieu of the suspension of proposed tariffs, the following procedures will be in effect.

If the Commission initiates an investigation of a tariff on its own motion or by complaint of another party within sixty (60) calendar days of the Effective Date of the tariff, and following investigation and hearing, the Commission were to order a decrease in a price or prices in an effective tariff within ninety (90) days of the filing of the motion or complaint, BellSouth may be required to credit the difference between the effective price or prices and the Commission-ordered price or prices to affected customers during that period of time. Commission-ordered modifications to a tariff, following investigation and hearing, shall be prospective when a complaint by a third party is filed more than sixty (60) calendar days following the Effective Date of the tariff or when the Commission initiates an investigation of a tariff more than 60 calendar days following the Effective Date of the tariff.

A. Tariffs proposing changes to terms or conditions for telecommunications services offered by BellSouth and regulated by the Commission shall be filed with an Effective Date at least fourteen (14) calendar days following the File Date.

B. Tariffs proposing price reductions for telecommunications services offered by BellSouth and regulated by the Commission shall be filed with an Effective Date at least one (1) calendar day following the File Date.

C. Tariffs proposing price increases for Retail Telecommunications Services, Switched Access Services, or Special Access Services in Tier I MSAs shall be filed with an Effective Date at least seven (7) calendar days following the File Date. Price increases for Retail Telecommunications Services, Switched Access Services, or Special Access Services in Tier II MSAs and Non-MSA areas shall be filed with an Effective Date at least fourteen (14) calendar days following the File Date.

D. Tariffs for New Services shall be filed with an Effective Date at least seven (7) calendar days following the File Date.

E. Tariffs that grandfather and/or eliminate telecommunications services shall be filed with an Effective Date at least thirty (30) calendar days following the File Date.[3] For tariffs that eliminate telecommunications services, the tariff shall provide customers no less than one hundred and fifty (150) days following the Effective Date during which affected customers will be given the opportunity to subscribe to alternative services before a customer's current services are eliminated.

3 Tariffs that grandfather and/or eliminate telecommunications services shall not be subject to the pricing limitations specified in Section 7 below.

7. PRICING RULES

A. Pricing Rules – General

The price for any new or existing service shall equal or exceed its LRIC unless: (1) specifically exempted by the Commission based on public interest concerns; or (2) BellSouth in good faith, and upon Commission approval, prices the service in order to meet the equally low price of a competitor.

In the event that BellSouth prices a service below LRIC to meet the equally low price of a competitor, any intrastate universal service fund which may exist cannot be utilized to offset the resulting revenue shortfall.

No price reductions that will result in prices below LRIC will be allowed unless approved by the Commission. With respect to existing services that are priced below LRIC on the effective date of this Plan, such as existing traditional flat-rate local exchange services for residential customers, no price reductions will be allowed unless approved by the Commission.

B. Pricing Rules – Tier I MSAs

Upon approval of this Plan for BellSouth, prices for existing traditional flat-rate local exchange residential service (1FR service) shall be capped at existing levels for three (3) years. Following the third anniversary of this Plan, prices for 1FR service may be increased by up to five percent (5%) per year. The tariff price for 1FR service, however, shall not exceed twenty dollars ($20) per month unless, following notice and hearing, specifically approved by the Commission.

Upon approval of this Plan for BellSouth, prices for Retail Telecommunications Services other than 1FR service, and prices for Special Access Services may be adjusted at the discretion of BellSouth.

C. Pricing Rules – Tier II MSAs and Non-MSA Areas

Upon approval of this Plan for BellSouth, prices for existing traditional flat-rate local exchange residential service (1FR service) shall be capped at existing levels for three (3) years. Following the third anniversary of this Plan, prices for 1FR service may be increased by up to five percent (5%) per year. The tariff price for 1FR service, however, shall not exceed twenty dollars ($20) per month unless, following notice and hearing, specifically approved by the Commission.

Upon approval of this Plan for BellSouth, price increases for Retail Telecommunications Services other than 1FR service, and prices for Special Access Services in Tier II MSAs and Non-MSA areas shall be adjusted at the discretion of BellSouth. Aggregate increases in these areas shall be limited to 5% annually.

D. Pricing Rules – Switched Access Services and Local Access Services

i) BellSouth may establish prices for all Switched Access Services. The combination of the traffic sensitive per minute charge for originating and terminating switched access service will be capped at the effective interstate level (including any non-traffic sensitive rate elements) approved for BellSouth by the Federal Communications Commission as of July 30, 2001. No intrastate access reduction will occur unless the subsidy to non-bundled, existing traditional flat-rate local exchange services for residential service provided by switched access is replaced by an end user charge or an intrastate universal service fund. The establishment of an end user charge or an intrastate universal service fund will only occur following notice and hearing.

ii) Regarding Local Access Services, the resale discount applicable to BellSouth's prices for standalone, regulated retail telecommunications services and terms, conditions, and prices for unbundled network elements will be formally reviewed and appropriately adjusted periodically following a hearing by the Commission.

8. CONTRACT SERVICE ARRANGEMENTS

Customer-specific contract service arrangements ("CSAs") may be offered by BellSouth to customers in Tier I MSAs for any product or service provided by BellSouth and regulated by the Commission. CSAs may be offered by BellSouth to customers in Tier II MSAs and Non-MSAs areas for any product or service provided by BellSouth and regulated by the Commission in response to a competitive alternative or in a unique customer situation.[4] Rates, terms, and conditions, and additional regulations, if applicable, for the CSA will be developed on an individual case basis and will include all relevant costs, plus an appropriate level of contribution. Unless otherwise specified, regulations applicable to a CSA are in addition to the applicable rates and regulations specified in BellSouth's tariffs.[5] CSAs become effective pursuant to the terms of the contract after the contract is signed by the customer.

Within twenty (20) calendar days after the end of a quarter, BellSouth will file a summary report of all CSAs executed during the preceding quarter. The report will include customer name, date signed, services provided, and contract prices. The summary report will be filed with the Commission's Telecommunications Division on a proprietary/confidential basis, with cost support information for a CSA available to the Telecommunications Division upon request. The Attorney General's office will be served with a copy of the letter that transmits the summary report to the

[4] See Footnote No. 2.

[5] Prices, terms, and conditions offered pursuant to a CSA that are different fromtariff prices, terms, and conditions for the same services are not considered discriminatory.

Telecommunications Division. BellSouth and the Attorney General agree to keep a comprehensive proprietary agreement in effect at all times to allow the Attorney General access to any proprietary/confidential information filed with the Commission's Telecommunications Division.

9. PROMOTIONS, CUSTOMER VALUE PROGRAMS, MARKETING/TECHNICAL TRIALS, & BUNDLED SERVICES

BellSouth may offer special Promotions and special Customer Value Programs, may conduct Marketing/Technical Trials, and may offer Bundled Services.

A. Promotions

Subject to the availability of products, services, and facilities, Promotions will be available to all subscribers meeting the eligibility criteria as set forth in the Promotion.

A Promotion containing a regulated, tariffed service shall not require an additional tariff filing. A transmittal letter shall be provided to the Commission for informational purposes only no later than one (1) calendar day prior to the commencement of the Promotion.

The following supporting documentation must be included with the transmittal letter for all Promotions:

i) A description of the Promotion (including terms and conditions);

ii) A description of the geographic area in which the Promotion will be offered;

iii) The eligibility criteria for the Promotion;

iv) The marketing period (beginning and ending dates);

v) The services included in the Promotion; and,

vi) Availability for resale.

Cost support will be available to the Commission Staff upon request.

B. Customer Value Programs:

Customer Value Programs will be available on a non-discriminatory basis to all subscribers meeting the eligibility criteria for each Program.

A Customer Value Program containing a regulated, tariffed service shall not require an additional tariff filing. A transmittal letter shall be provided to the Commission for informational purposes only no later than one (1) calendar day prior to the commencement of the Customer Value Program.

The following supporting documentation must be included with the transmittal letter for all Customer Value Programs:

i) A description of the Customer Value Program (including terms and conditions);

ii) A description of the geographic area in which the Customer Value Program will be offered;

iii) The eligibility criteria for the Customer Value Program;

iv) The marketing period (beginning and ending dates); and,

v) Availability for resale.

Cost support will be available to the Commission Staff upon request.

C. Marketing/Technical Trials

A Marketing/Technical Trial shall not require a tariff filing. A transmittal letter shall be provided to the Commission no later than one (1) calendar day prior to the commencement of the Marketing/Technical Trial.

The following supporting documentation must be included with the transmittal letter for all Marketing/Technical Trials:

i) A description of the parameters of the Trial (including terms and conditions);

ii) A description of the geographic area in which the Trial will be offered; and,

iii) The rates and charges for the Trial, including any applicable range of rates within which the rates may be increased or decreased.

Marketing/Technical Trials may be offered for not less than one (1) month or more than twelve (12) months.

D. Bundled Services[6]

Bundled Services may be offered to eligible customers in BellSouth's service areas. BellSouth shall specify the components of the Bundled Service offering.

Subject to the availability of products, services, and facilities, Bundled Services will be available to all subscribers meeting the eligibility criteria for such Bundled Services.

A Bundled Service containing a regulated, tariffed service shall not require an additional tariff filing. A transmittal letter shall be provided to the Commission no later than one (1) calendar day prior to the offering of the Bundled Service.

The following supporting documentation must be included with the transmittal letter for all Bundled Services:

i) A description of the Bundled Service (including terms and conditions);

ii) A description of the geographic area in which the Bundled Service will be offered;

iii) The eligibility criteria for the Bundled Service; and,

iv) The marketing period (beginning and ending dates).

While the regulated, standalone retail components of a Bundled Service are available for resale at the tariffed price and corresponding wholesale discount, the Bundled Service offered at one price shall not be available for resale.

Cost support will be available to the Commission Staff upon request.

10. SERVICE QUALITY

BellSouth will conform to the service standards outlined in Section T-21 of the Commission's Telephone Rules.[7] The Commission may require submission of reports and data as it deems necessary to monitor service performance.

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6 Existing rules and regulations, such as those involving bill payment, the allocation of payments between regulated and nonregulated services, and discontinuance of service for non-payment, remain in effect when customers subscribe to Bundled Services, unless and until modified by the Commission.

7 Upon adoption of this Plan, the Commission will open a rulemaking to consider revisions to T-21 to reflect the current technical and operational telecommunications environment.

11. EFFECTS OF EXTRAORDINARY GOVERNMENTAL ACTIONS

The financial impact of governmental mandates, both state and federal, that applies specifically and/or disproportionately to and has a major negative impact on telecommunications companies, may be recovered through an adjustment to the prices for Retail Telecommunications Services and Interconnection Services. In such an event, BellSouth shall notify the Commission of its intent to adjust prices. Such notice shall provide schedules and appropriate tariffs for the adjusted prices. Following notice and hearing, the Commission may approve, modify, or deny BellSouth's proposed tariffs.

A "major" impact is an amount (intrastate only) exceeding two percent (2%) of BellSouth's total intrastate regulated revenues booked in the preceding calendar year. In order for pricing adjustments to occur under this provision, BellSouth must demonstrate to the Commission the effect of the major impact. Price increases implemented under this provision shall not impact any price increases permitted by Section 7 of this Plan.

12. CUSTOMER NOTIFICATION

BellSouth will provide customer notification of any price increases to all affected customers either by bill message, bill insert or direct mail at the option of the Company at least seven (7) calendar days before any regulated prices are increased. Notice of a price increase shall include at a minimum the effective date of the price change(s), the existing price(s), and the new price(s).

Any affected customer may, within thirty (30) days of the Effective Date of any price increase, elect to cancel his/her subscription to a service that has been increased and BellSouth will credit the customer's bill by the amount of the price increase if the increase has been reflected on the customer's bill prior to the cancellation of the service.

13. REPORTING REQUIREMENTS

BellSouth shall file an annual Alabama combined income statement, its Form 10-K, its Annual Report to Stockholders, and an annual report on the status of local competition within its operating area with the Commission by April 1st of each year.

14. CUSTOMER COMPLAINT RESOLUTION

The Commission's existing customer complaint procedures shall remain in effect.

15. COMMISSION AUTHORITY

Upon adoption of this Plan for BellSouth, the Commission will regulate and BellSouth will operate pursuant to the requirements, rules, and regulations of this Plan. The Commission will conduct an assessment of this Plan beginning with the third anniversary date of the Plan in 2007 and will complete the assessment within one hundred and eighty (180) days following the third anniversary date. The need for and frequency of future assessments will be determined during the initial assessment of the Plan.

The Commission may not modify or repeal any portion of this Plan without notice and hearing. BellSouth or any affected third party may, as market conditions change, petition the Commission for modifications to this Plan. Modifications will only be made following notice and hearing by the Commission.

Attachment A
Page 1

CLASSIFICATION OF BELLSOUTH'S WIRE CENTERS

Tier I MSAs

Birmingham-Hoover	Huntsville	Mobile	Montgomery
Alabaster	Athens Elk River	Airport	Fort Deposit
Bessemer Birmingport	Athens Main	Azalea	Dalraida
Bessemer Hueytown	Gurley	Bay Front	Holtville
Bessemer Main	Hazel Green	Belle Fontaine	Main & Toll
Cahaba Heights	Lakewood	Citronelle	Millbrook
Calera	Madison New Main	Mount Vernon	Normandale
Carbon Hill	Madison Old Main	Old Shell	Prattville
Center Point	Main & Toll	Prichard	Wetumpka
Centreville	Parkway	Saraland	
Chelsea	Redstone Arsenal	Semmes	
Clanton	Research West	Skyline	
Columbiana	Strategic Defense	Springhill	
Cordova	University	Theodore	
Dora			
Eastlake			
Eastwood			
Ensley			
Five Points			
Forestdale			
Gardendale			
Graysville			
Homewood			
Jasper			
Main & Toll			
Maplesville			
Montevallo			
Oak Mountain			
Oxmoor			
Parrish			
Pinson			
Riverchase			
Tarrant			
Valley			
Vincent			
Warrior			
West Blocton			
West End			
Woodlawn			

Attachment A
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CLASSIFICATION OF BELLSOUTH'S WIRE CENTERS

Tier II MSAs

Anniston	Auburn	Columbus	Decatur
Jacksonville	Auburn	Hurtsboro	Courtland
Lenlock	Opelika	Phoenix City Fort Mitchell	Decatur
Main & Toll		Phoenix City Main	Hartselle Main
Ohatchee			Hartselle Pence
Oxford			Moulton
Piedmont			Towncreek

Florence	Gadsden	Pensacola	Tuscaloosa
Florence	Attalla	Flomaton	Bessemer Bucksville
Killen	Boaz		Druid Hill
Leighton	Hillside		Eutaw Boligee
Lexington	Main & Toll		Eutaw Main
Rogersville	Rainbow Drive		Greensboro
Sheffield			Northport
			Tuscaloosa Main

Non-MSA Areas

Albertville	Fairhope	Red Bay
Alexander City	Fort Payne	Russellville
Bay Minette	Goodwater	Selma
Brewton	Guntersville	Spanish Fort
Bridgeport	Hanceville Bremen	Stevenson
Childersburg	Hanceville Main	Sylacauga
Clayton	Jackson	Talladega Main
Cullman Fairview	Lafayette	Talladega Renfro
Cullman Jones Chapel	Linden	Thomasville
Cullman Main	Livingston	Troy
Dadeville	Marion	Tuskegee
Demopolis	McIntosh	Uniontown
Eufaula	Munford	York
Evergreen		

Attachment B
Page 1

CLASSIFICATION OF SERVICES BY CATEGORY

Retail Services

A2 General Regulations
- A2.4.3.G Returned Check/Bank Draft Charge
- A2.4.3.K Miscellaneous Fees

A3 Basic Local Exchange Service
- A3.2.1 Flat Rate Residence and Business Service
- A3.2.9 Area Calling Service
- A3.2.10 Complete Choice® Service
- A3.10.2 Bay Minette Exception
- A3.10.3 Bridgeport Exception
- A3.10.4 Reverse Billing Option (Bridgeport)
- A3.2.11 Area Plus® Service
- A3.7 Measured Rate Service
- A3.12 NAR Usage Packages
- A3.13.3 Directory Assistance Service
- A3.14.3 Local Operator and Calling Card Service
- A3.15 Local Operator Verification/Interruption Service
- A3.19 Grouping Service
- A3.20 Trunk Lines
- A3.24 Directory Assistance Call Completion Service
- A3.25 Directory Assistance/Directory Assistance Call Completion Service
- A3.26 Network Access Service
- A3.27 Trunk Side Access Facility
- A3.30 Exchange Access Premium Charge
- A3.31 Lifeline
- A3.32 Classroom Communication Service
- A3.38 Back-Up Line Service
- A3.43 BellSouth Business Plus Service
- A3.45 Complete Choice® for Business Package

A4 Service Charges
- A4.2.7 Installment Billing
- A4.3 Residence and Business Service Charges
- A4.4 Dual Service
- A4.7 Link-Up

A5 Charges Applicable Under Special Conditions

A6 Directory Listings

A8 Telephone Answering Service Facilities

A9 Foreign Exchange Service & Foreign Central Office Service

A12 Central Office Non-Transport Offerings
- A12.4 Assigned Centrex Type Services Telephone Numbers Without Facilities
- A12.7 Direct-Inward Dialing Service
- A12.8 Identified-Outward Dialing From PBX Systems
- A12.16 Prestige® Communications Service
- A12.20 MultiServ® Service
- A12.21 MultiServ® Plus Service
- A12.22 MultiServ® Multi-Account Service
- A12.25 BellSouth® Centrex Service
- A12.26 BellSouth® Centrex ISDN Service

A13 Miscellaneous Service Arrangements
- A13.5 Arrangements for Night, Sunday and Holiday Service
- A13.9 Custom Calling Service

Attachment B
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CLASSIFICATION OF SERVICES BY CATEGORY

Retail Services (cont'd)

A13.11	Remote Call Forwarding
A13.12	Selective Class of Call Screening Service
A13.13	Dormitory Communications Service
A13.14	Toll Trunks
A13.16	Local Calling Area Conference Service
A13.17	Feature Packages
A13.19	TouchStar® Service
A13.20	Call Screening and Restriction Services
A13.25	Extension Line Channels
A13.27	Emergency Reporting Services
A13.30	Automatic Time and Charge Reporting Service
A13.34	Ringmaster® Service
A13.46	SMDI
A13.47	Message Waiting Indication
A13.49	Surrogate Client Number
A13.50	Telecommunications Service Priority System
A13.51	Electronic White Pages
A13.53	Multiline Hunt Queuing
A13.56	Hot Line Service
A13.57	Warm Line Service
A13.58	Uniform Access Number
A13.59	Automatic Number Identification
A13.60	Custom Service Area
A13.61	Answer Supervision
A13.62	Call Detail Information
A13.70	BellSouth® Privacy Director® Service
A13.72	Inter-Switch SMDI
A13.76	Internet Call Waiting Service
A13.77	Voice Mail Companion Services Package
A13.78	BellSouth Essentials Package
A13.79	211 Dialing Service
A13.80	711 Dialing Code for TRS
A13.81	511 Dialing Service

A14	Auxiliary Equipment
A15	Connections With Certain Facilities and/or Equipment Of Others
A18	Long Distance Message Telecommunications Service
A19	Wide Area Telecommunications Service
A20	Optional Calling Plans
A29	Data Transport Service
A32	Integration Plus Management Services
A34	Advanced Intdligent Network Services
A37	Billing and Collection Services
A38	Listing Services
A40	Fast Packet Transport Services
A42	ISDN
A43	Channelized Voice Transport Services

CLASSIFICATION OF SERVICES BY CATEGORY

Retail Services (cont'd)

A47	BellSouth® Remote Access Service
A103	Obsolete Service Offerings – Basic Local Exchange Services
A108	Obsolete Service Offerings – Telephone Answering Service Facilities
A111	Obsolete Service Offerings – ESSX-1 Service
A112	Obsolete Service Offerings – Central Office Non-Transport Services
A113	Obsolete Service Offerings – Miscellaneous Service Arrangements
A120	Obsolete Service Offerings – Optional Calling Plans
A123	Obsolete Service Offerings – ESS Central Office Features
A125	Obsolete Service Offerings - Lightgate® Digital Service
A126	Obsolete Service Offerings – Exchange Digital Services
A129	Obsolete Service Offerings – Data Transport Service
A131	Obsolete Service Offerings – Multi-Location Business Service
A134	Obsolete Service Offerings – AIN Services
A139	Obsolete Service Offerings – Abbreviated Dialing
A140	Obsolete Service Offerings – Fast Packet Transport Services
A142	Obsolete Service Offerings – ISDN
B3	Channels
B4	Equipment
B7	Digital Network Services
B8	Custom Network Service
B103	Obsolete Service Offerings – Channels
B104	Obsolete Service Offerings – Equipment
B107	Obsolete Service Offerings – Digital Network Services

Interconnection Services

A7	Coin Telephone Service
A35	Interconnection of Mobile Services
E3	Carrier Common Line Access Service
E5	Ordering Options for BellSouth SWA and Special Access Service
E6	BellSouth SWA Service
E7	Special Access Service

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CLASSIFICATION OF SERVICES BY CATEGORY

Interconnection Services (cont'd)

E8	Billing and Collection Services
E9	BellSouth Directory Assistance Access Service
E18	Operator Services Access Services
E20	Expanded Interconnection Service
E21	Fast Packet Access Service
E34	Advanced Intelligent Network Services

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